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POLITICAL, SOCIOLOGICAL AND MILITARY AFFAIRS
No. 2078

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# EAST EUROPE REPORT POLITICAL, SOCIOLOGICAL AND MILITARY AFFAIRS

No. 2078

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#### INTERNATIONAL AFFAIRS

GDR, USSR MILITARY RADIATION MEASUREMENT EQUIPMENT DESCRIBED

East Berlin MILITAERTECHNIK in German No 4, 1982 (signed to press 13 May 82) and No 5, 1982 (signed to press 16 Jul 82)

<u>/</u>No 4, 13 May 82 pp 208-21<u>0</u>7

 $\sqrt{\text{Text}}$  1. Definition and Significance

By the term "military nuclear radiation measurement technology" is understood that part of measurement technology and, in a more restricted sense, radiation measurement technology, which is concerned with the determination, by technical measurements, of such radiation source—and radiation field—variables as are caused by transformations of atomic nucleus and which are military relevant. This means that radiations of non-nuclear origin (e.g. laser light or sound) on the one hand and the present—day civil nuclear radiation measurement technology on the other hand are definitely excluded. The general term "ionizing radiation", which is sometimes used, is avoided here intentionally, because it would, for example, also include X rays and short-wave UV-light.

From another perspective, the term "military nuclear radiation measurement technology" on the one hand includes procedures (methods) and on the other hand includes devices (means, equipment), by means of which the measurement variables of a militarily interesting nuclear radiation can be determined, which are relevant for the physical, chemical, and especially biological action of such radiation.

At the present time, the militarily significant measurement variables include dose power and dose in nuclear radiation fields caused by nuclear weapons, as well as the activity and activity concentration of nuclear radiation sources. The nuclear radiation types of interest here, in order of their significance, include gamma radiation, neutron radiation, beta radiation, and alpha radiation.

The military nuclear radiation measurement methods and devices can be subdivided in accord with Table 1, and can be associated with one another and with certain types of measurement variables.

In a war, in which nuclear weapons or radioactive combat means would be used, or in which radioactive materials would be released as the secondary effect of conventional weapons or of acts of sabotage against nuclear installations, the military nuclear radiation measurement technology would be particularly

Table 1: Organization of Military Nuclear Radiation Measurement Tasks and Devices

	Nuclear Radiation Measurement Task	Nuclear Radiation Measuring Unit	Type of Measure- ment Variable
1.	Measuring tasks in the field		
1.1.	Nuclear radiation reconnaissance	;	γ-dose power
1.1.1.	Nuclear radiation warning (nuclear radia-tion observation)	Nuclear radiation warning devices (nuclear radiation indicator)	γ-dose power, threshold(s)
1.1.2.	Nuclear radiation reconnaissance of rooms, sections, and directions (land	Nuclear radiation recon- naissance devices (for land and vehicles	γ-dose power
1.1.3.	(at sea)	(for ships)	γ-dose power
1.1.4.	(from the air)	(for aircraft)	γ-dose power
1.1.5.	Checking nuclear radia- tion (general)	Nuclear radiation checking devices	γ-dose power
1.1.6.	Checking nuclear radia- tion (special)	Radiological laboratories and special services	Specific $\alpha$ or $\beta$ activity
1.1.7.	Nuclear radiation warning, reconnais-sance, and checking	Combination devices	γ-dose power
1.2.	Nuclear radiation dosimetry	Nuclear radiation dosimeter	Nuclear radiation dose
1.2.1.	Personnel dosimetry	Personnel dosimeter	Equivalent dose
1.2.2.	Group dosimetry	Group dosimeter	Equivalent dose
1.2.3.	Equipment dosimetry	Equipment dosimeter	Energy dose
2.	Peacetime radiation pro- tection measurement tasks		
2.1.	Data-gathering measurements	Dose-power meter, Activity meter,	Gamma and neutron dose,
2.2. 2.3. 2.4.	Checking measurements Contamination measurements Shielding measurements	Pulse-density meter, Dosimeter	dose power, α and β activity, Pulse-density,energy
2.5.	Source activity de- termination	Dose-power meter, dosimeter, activity meter	Dose power, dose, specific activity
2.6.	Radiation warning	Radiation warning devices	Dose power
2.7.	Personnel dosimetry	Personnel dosimeter	Energy dose
2.8	Place dosimetry	Place dose all the possible but only th	Energy dose

Remark: The table does not show all the possible but only the most frequent associations of task, device, and variable.

significant, primarily because nuclear radiation - in contrast to most other effective weapons - cannot be perceived specifically with any of the human senses and because the effect of radiation can very significantly influence all military decisions.

The step-by-step discovery, researching, and bringing into use of X rays and of types of nuclear radiation was from the very beginning possible only in close collaboration with suitable measurement means. Frequently, the measurement effect was discovered first, but the phenomenon on which it was based was interpreted correctly only much later. Thus, Konrad Röntgen 1895 could demonstrate the invisible X rays, which in many countries are presently called Röntgen rays, only because they accidentally struck fluorescent crystals and caused these to emit light in the visible range of the human eye.

Becquerel, too, after whom the unit of activity (Bq) is now named, detected radioactivity in 1896 only because he accidentally stored his uranium formulation together with photographic plates, which were exposed by the penetrating radiation right through the opaque paper cover. The method that was found in this way is still used today as radiography in research and production, and the film dosimeter of the Government Agency for Atomic Safety and Radiation Protection of the GDR likewise works according to this principle.

After the discovery of nuclear fission by Otto Hahn (1938), many research laboratories began to work with radioactive materials, partly to use nuclear fission for scientific purposes, but mainly to search out ways to use the new discovery for weapons or for peaceful applications. Nuclear radiation measurement devices for these researches were usually fabricated in the institutes themselves and were quite prone to trouble, complicated to operate, and usable only on a laboratory scale.

#### 2. Development of Nuclear Radiation Measurement Devices After Hiroshima

In August 1945, USA imperialism reached its immediate target in military nuclear research and - after a test detonation in New Mexico - used the first two nuclear fission weapons to destroy the Japanese cities of Hiroshima and Nagasaki without military necessity. Thus the USA simultaneously initiated the era of nuclear weapons in weapons history as well as the cold war against Socialism. To protect the socialist camp, which formed after the end of the war, against imperialist extortion and war, the Soviet Union very quickly likewise had to develop and produce nuclear weapons.

During this time, thousands, and later on tens of thousands, suitable nuclear radiation measurement devices were quickly required, first for uranium mining, then for the nuclear weapons industry, and finally for nuclear weapons protection of the armies and countries.

Naturally, there was not yet any experience with military nuclear radiation measurement technology. Consequently, in developing the first nuclear radiation measurement devices for use in the field, one had to draw on the many years of

Table 2: Significance of Symbols in Abbreviations for Nuclear Radiation Measurement Devices

Nuclear Radiation Measurement Devices from GDR Production:

R Radiological equipment/radiometer

M Measuring unit A Activity meter

D Dosimeter

C Dosimeter type which requires an evaluation unit

SA Radiation indicator

Arabic numerals: year of the planned completion of development:

Roman numerals: device generation (within the device type)

Ch Chemical equipment

Lab Laboratory

Letters following the numerals:

D Dynamo operation

N Power supply

O For stationary objects, service agencies (not mobile)

K For motor vehicles (also tanks)

S For maritime yehicles

L For airborne vehicles

Nuclear radiation measurement units from USSR production:

D Dosimetric-radiometric equipment

P Device (Pribor)

First numeral: device type (e.g. 1 X-ray meter, 2 radiometer, etc.)

Second numeral: device generation (within the device type)

experience of the laboratory measurement engineers. Thus it came about that the first generation of devices very closely resembled the prior laboratory devices. These devices were indeed technically suitable for the most important measurements, but were useful for field use only with certain restrictions (not matched to their task spectrum, bulky, heavy, complicated to maintain and operate, mechanically sensitive and trouble-prone).

For this reason, this first generation of military nuclear radiation measurement devices was already followed in the fifties by a second, significantly improved generation, and measurement methods specific to the army began to delineate themselves. The evaluation units for personnel dosimeters of the Soviet Army had a desk-shape (Figure 1) for example. On the other hand, specialization already appeared with nuclear radiation reconnaissance devices.

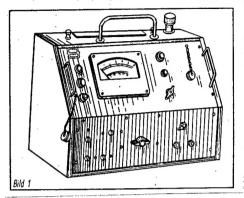


Figure 1: Soviet Dosimeter Evaluation Unit of the Fifties

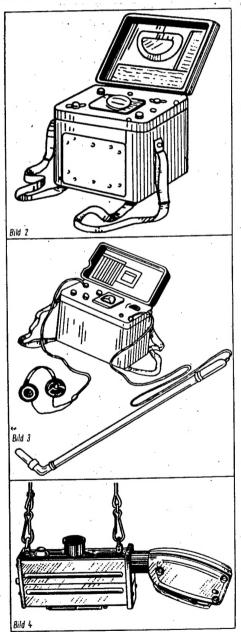


Figure 2: Soviet Dose-power Measuring Unit DP 1 of the Fifties

Figure 3: Activity Measuring Unit DP 11 for Checking Nuclear Radiation (USSR)

Figure 4: Nuclear Radiation Indicator DP 62 (USSR) for Detecting Nuclear Radiation by the Flickering of Incandescent Lamps

The Soviet dose-power measuring unit DP 1 (Figure 2, for designation code, see Table 2), was box-shaped and was carried in front of the abdomen; the activity measuring unit for checking nuclear radiation, DP 11 (Figure 3), already had an easily handled rod probe, by means of which activity could easily be measured even with great sophistication. The reconnaissance units of the chemical service of the NVA (National People's Army) were equipped during the fifties with the Soviet x-ray meter DP 1, the radiometer DP 11, and the dosimeter set DP 21. For non-structural reconnaissance groups, there was the nuclear radiation indicator DP 62 (Figure 4), by which nuclear radiation could be detected but not measured.

## 3. First Nuclear Radiation Measurement Device Generation of the NVA From GDR Production

Since the USSR could not completely cover the quantities of nuclear radiation measurement devices that were needed by its sister countries, the GDR, in the second half of the fifties, exerted great efforts in developing nuclear radiation measurement devices and radiological laboratories of its own for nuclear weapons protection and to produce these on a production basis so as to cover its needs. This also corresponded to the recommendations of the working team on "Nuclear Radiation Measurement Equipment" of the socialist armies, which assembled for the first time in Moscow in 1957. At that time, the GDR agreed to make a suitable contribution towards the development and production of military nuclear radiation measurement devices.

In the early fifties, small series of the x-ray meter DP 1 and of the dosimeter set DP 21 were produced by license in the Institute for Device Construction (IFG) of the Academy of Sciences of the GDR. Building on this experience, the dosimeter set RDC 2 (Figure 5) was developed. From the perspective of that time, this unit was very small, light, and easy to operate. It was produced by the VEB (State Enterprise) Vakutronic (now VEB Robitron Measurement Electronics) Dresden. This was the first device type of the first nuclear radiation measurement device generation that was developed in the GDR. To this was soon added the "Curie meter" which was developed in the VEB Vakutronik. It was introduced into the NVA with the designation "Activity Meter RAM 60" (Figure 6).

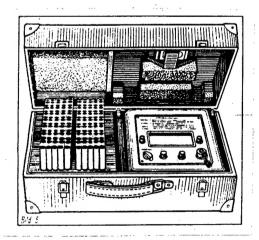


Figure 5:
Dosimeter Set RDC 2 (GDR)

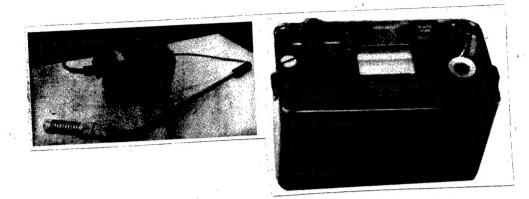


Figure 6. Activity Meter RAM 60 (GDR)



1. Figure 8. Radiometer DP 12 (USSR)

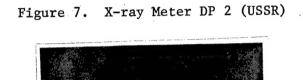




Figure 9. Radiation Indicator DP 63 (USSR)

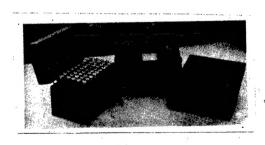


Figure 10. Dosimeter Set DP 23 (USSR)

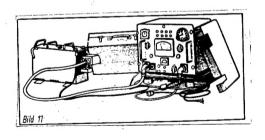


Figure 11. Radiation Measuring Station DP 100 (USSR)

Beginning in 1960, the NVA also obtained Soviet nuclear radiation measurement devices of the second and third device generation. These were the x-ray meter DP 2 (Figure 7), the vehicular x-ray meter DP 3, the radiometer DP 12 (Figure 8), the radiation indicator DP 63 (Figure 9), and the dosimeter set DP 23 (Figure 10), which were mainly imported in a complex with large-scale technology. The x-ray meter IH 2 was introduced from the Hungarian People's Republic. Furthermore, it was intended, in case of actual application, to import the liquid dosimeter DP 72, which was available as a training model, together with its evaluation units (colorimeter) PK 56.

A mobile radiological field laboratory (two G 5 trucks with trunk superstructures) were created for specially checking on nuclear radiation. They were built according to the then prevailing perspectives and had measurement stations and devices that were available at that time, which were only poorly suited for field use. There also were portable field laboratories from the USSR with the radiation measurement station DP 100 (Figure 11), which was already quite well suited for field operation.

The most important measurement tasks could be qualitatively and quantitatively secured with these types of devices, which numbered about 10. In terms of types, the device contribution developed in the GDR was still only small, and the devices did not yet represent top performance on an international scale. However, they were necessary to guarantee the combat readiness of the NVA.

 $/\overline{N}$ o 5, 16 Jul 82 pp 269-27 $\overline{1}$ 

/Text/ 4. GDR's Second Generation of Nuclear Radiation Measurement Equipment

Although developmental stages are hard to delimit objectively and cannot be specified precisely to the exact day, it seems justified to me to assume the time interval from 1963 to 1970 for the second generation of nuclear radiation measurement devices developed and produced in the GDR. During this time, a collective of specialists of Dresden Technical University, of the VEB Measurement Electronics (previously Vakutronik) Dresden, and of the NVA, in socialist collaboration, analyzed international trends, technical possibilities, developmental and production experience, but especially the experience of the troops in the design, utilization, and repair of previous nuclear radiation measurement devices, and converted this information into new task definitions. During the course of many heated discussions, all the participants succeeded in liberating themselves from preconceptions and troublesome traditions.

New, often daring, and not uncontested paths were taken in significant directions. As an example one might mention the old "rule for measurement engineers" which even today has not been fully eradicated, namely that one must measure as precisely as possible. Much better obviously is the requirement: as accurately as necessary, as suitably and economically as possible. At that time, the opinion was also widespread that the large fluctuations and temperature dependence of transistors would exclude their use in measurement equipment, and that

thermoluminescence dosimetry could not suitably be applied to military purposes. Both of these opinions could be overcome.

Thus, at the very beginning of the second device generation, internationally the first fully transistorized field radiometer RAM 60 A (with GDR transistors), the universally applicable hand-dynamo-fed radiation indicator RSA 64 D (Figure 12), the automatic nuclear radiation warning device RW 64 (Figure 13), and the alphascintillation activity meter RAM 63 (Figure 14) could be included and introduced within the equipment of the NVA.



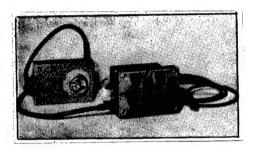


Figure 12: Radiation Indicator RSA 64 D Figure 13: Radiation Warning Unit (transistorized, GDR)

RW 64 (GDR)

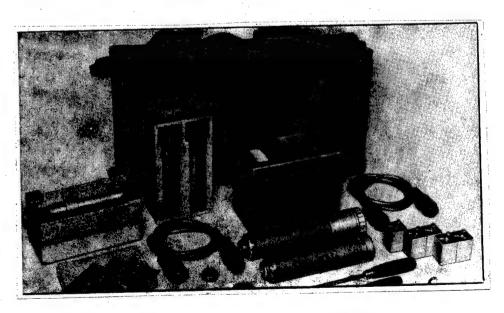


Figure 14: Alpha-Scintillation Activity Meter RAM 63 (GDR)

A recognized top performance was successfully accomplished with the dosimeter system RDC 64, which replaced three types of dosimeters, all of which have previously been regarded as necessary, and with which every member of the armed forces could be equipped.

The radiometer RR 66 (according to international terminology: radiometer x-ray meter) was a combination solution favorable from a military-economic perspective. In the NVA, it replaced the Hungarian dose-power meter IH 2, the activity meter RAM 60 A, and partly also the nuclear radiation indicator RSA 64 D.

As a modification of the nuclear radiation warning device RW 64 for vehicles, there were developed the special designs RW 64 0 (Figure 15) with a line connection and an emergency power supply for stationary objects and RW 64 S for ships (Figure 16).

The very low-inertia indicating activity meter RAM 63 could be converted, with little effort, into a dose-power meter for nuclear radiation reconnaissance from the air. Also replaced were the large mobile and portable radiological and chemical laboratories. A small combined mobile type of laboratory was substituted for them.

In a positive sense, the use of semiconductor electronics and electronically calibratable circuits were characteristic for the second device generation which came to its end in 1970. As a result, calibration with strong gamma sources and frequent tube changes was obviated, although this had previously been necessary every half year. The maintenance time could be extended up to 4 years.

As negative characteristics, one must note that the devices were mechanically sensitive because they had pointer measurement instruments. Especially when checking for nuclear radiation, they were difficult to read.

#### 5. Nuclear Radiation Measurement Devices of the Third Generation

The transition from the second to the third nuclear radiation measurement device generation took place in the NVA during the years 1970/71. The first device of this generation was the nuclear radiation warning and reconnaissance device RWA 72 K (Figure 17) which has been described in (6). It replaced the RR 66, the RW 64, and the RSA 64 D, to the extent that the latter had not already been replaced by the RR 66. The RWA 72 K can also be used on ships, inasmuch as 12 Volts are available.

For use in objects, the RWA 72 K was supplemented with the suitcase-shaped power supply RWA 72 N and, together with this unit, forms the RWA 72 O.

The RWA 72 devices operate according to a novel measurement principle. The disadvantages which the troops complained about in their precursor devices, for example the necessary but practically impossible simultaneous reading of pointer positions and observation of the probe have been eliminated. However, it was first necessary to dispose of the widespread opinion that a pointer-based

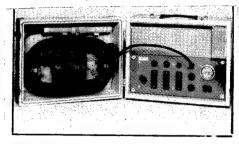


Bild 15 Kernstrahlungswarngerät RW 64 O (DDR)

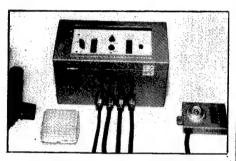


Bild 16 Kernstrahlungswarngerät RW 64 S (DDR)



Figure 15. Nuclear Radiation Warning Device RS 64 0 (GDR)

Figure 16. Nuclear Radiation Warning Device RS 64 S (GDR)

Figure 17. Nuclear Radiation Warning and Reconnaissance Device RS A 72 K (GDR)

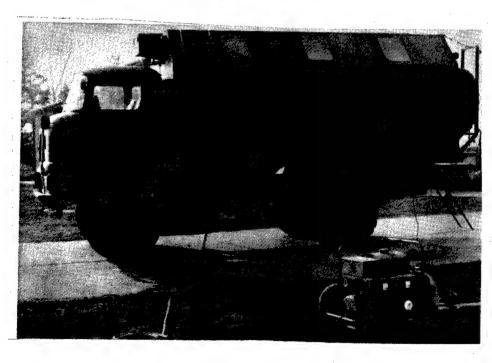


Figure 18. Radiological-Chemical Field Laboratory RChLab II (GDR)

Table 3: Selected Data of Events Relating to the Historical Development of Military Nuclear Radiation Measurement Technology

Year Event  1895 W.C.Röntgen discovers "X rays".  1898 M. and P. Curie introduce the designation "radioactivity".  1899 E.Rutherford for the first time distinguishes alpha and beta radiation.  1908 E.Rutherford and H.Geiger describe the first alpha particle counter.  1913 H.Geiger introduces the "peak counter" for beta particles.	r .
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1908 E.Rutherford and H.Geiger describe the first alpha particle counter.	
1012 II Coigan introduces the Unack countant for hote particles	
1913 H.Geiger introduces the "peak counter" for beta particles.	
1924 H.Greinacher uses electron tubes to amplify counting tube pulses.	
1928 H.Geiger and W.Müller invent the G-M counting tube.	
1929 W.Bothe invents the coincidence method.	
1932 J. Chadwick discovers the neutron; D. Iwanenko postulates the composition atomic cores from protons and neutrons.	n of
1935 A.Trost invents the "self-quenching" counting tube.	
1938 O. Hahn together with F. Strassmann discovers uranium fission.	
1939 A. Einstein informs Roosevelt concerning the atom bomb problem.	
1945 16 July, first nuclear weapons test in New Mexico (USA).	••
6 August, first deployment of nuclear weapons on the part of the USA (Hiro	shima).
9 August, second deployment of nuclear weapons on the part of the USA (Naga	saki).
Invention of crystal counters by P.J.yan Heerden	
1947 I.Borsen and H.Kallmann use scintillation counters with PSEV (photomult	iplier)
1949 First Soviet nuclear weapons test (end of the USA nuclear weapons monor	oly).
1954 First nuclear power plant goes into operation in Obninsk near Moscow.	
1956 Introduction of the x-ray meter DP 1A and B and of the laboratory RLU 1	ι,
1957 Introduction of the DP 1C and of the dosimeter system DP 23A.	
1958 Introduction of the radiometer DP 11B and of the first nuclear radiation	วท
measuring unit developed in the GDR, the dosimeter RDC 2.	
1961 Introduction of the activity meter RAM 60.	
1963 Transition from the first to the second GDR nuclear radiation measuring	y unit
generation.	
Introduction of the nuclear radiation measurement devices DP 63, DP 12,	,
RLab/G 5 and RChLab 62/LO	
1965 Introduction of the nuclear radiation measurement devices IH 2, DP 3,	
RSA 64D, and RAM 60A.	
1966 First nuclear power plant in the GDR becomes operational at Rheinsberg.	
Introduction of the nuclear radiation measurement unit RW 64 (for motor	^
vehicles) and of the scintillation activity meter RAM 63 for $\alpha$ , $\beta$ , and	
$\gamma$ radiation.	
1967 Introduction of the radiometer RR 66 and of the RAM 63L for aircraft.	
1969 Introduction of the dosimeter system RDC 64.	1-1-2
1970 Transition from the second to the third nuclear radiation measurement of	ievice
generation.	
1972 Foundation of Interatom instrument at the 26th RGW (CEMA) Congress.	mac
1973 First expansion stage of the nuclear power plant "Bruno Leuschner" become	mes
operational;	721/
Introduction of nuclear radiation warning and reconnaissance units RWA	/2K.
1975 Introduction of the RChLab II (on LO).	
1976 Introduction of the RWA 72 O (for stationary objects).	
1980 Introduction of the neutron-gamma dosimeter system RDC III.	
1980 Introduction of the neutron-gamma dosimeter system RDC 111.	

measuring unit is necessary for radiation measurements so that averages and measurement trends can also be detected. Within the framework of the preliminary research, this could be done by thorough phantom trials.

Another top unit of the third generation is the neutron-gamma dosimeter system RDC III. Compared to its precursor RDC 64, the following main advantages should be mentioned: bioligically correct sensitivity with respect to weapons neutrons, operational reliability achieved by far-reaching automation, and ease of operation.

The radiological-chemical mobile field laboratory RChLab II (Figure 18), which has been described in (7), also belongs to the third device generation. It represents a further development of the RChLab of the second generation.

To clarify the device abbreviations, Table 2 (see "mt" 4/82) contains the codes for the nuclear radiation devices from Soviet and GDR production. Table 3 contains a survey of the important historical data relating to military nuclear radiation measurement technology.

#### **FOOTNOTES**

- (1) W. Fratzscher and H. Felke, Introduction to Nuclear Energetics, Leipzig 1971, p 23.
- (2) E. Padelt and H. Laporte, Units and Magnitudes in the Natural Sciences, Leipzig 1976, p 25.
- (3) P. Stulz, Strong-light Atom, Berlin 1973.
- (4) K. Langhans, Nuclear Weapons Radiometry and Nuclear Weapons Detonometry, Berlin 1970.
- (5) K. Langhans, Nuclear Radiation Measurement Devices, Berlin 1960.
- (6) K. Langhans, Nuclear Radiation Warning and Reconnaissance Device RWA 72 K. In: militartechnik (Military Engineering) Vol 3/1975, p 124 ff.
- (7) K. Langhans, Radiological-Chemical Field Laboratory for Field Investigation of Radioactive and Chemical Materials. In: militartechnik (Military Engineering) Vo. 2/1979, pp 97-98.

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#### CRUCIAL PHASES IN DEVELOPMENT OF GDR HISTORIOGRAPHY ANALYZED

Bonn DAS PARLAMENT in German Vol 32 No 36, 11 Sep 82 'from politics and contemporary history' supplement pp 17-26

[Article by Dr Guenther Heydemann, Department of Current History, Bayreuth University: "Marxist-Leninist Contemporary History in the GDR--Genesis, Development, Functions, and Trends." For related information see translation of a Cologne DEUTSCHLAND ARCHIV article by the same author, published with one by Dr Klaus Goebel of Ruhr Pedagogical College, under the heading, "West German Analysis: Development of GDR Historiography," in JPRS 75760, 23 May 80, No 1788 of this series, pp 41-681

[Text] A year ago, the respected Italian daily CORRIERE DELLA SERA--pointing to the problems confronting the Federal Republic of Germany--called the FRG a country seemingly petrified "in an ahistorical present." 1

However one may evaluate this assessment by a foreign observer, it is a fact that for many years the history up to 1945 attracted more attention in this country than did the recent, post-1945 past, the period comprising the establishment and development of the Federal Republic of Germany, which—like the GDR, its eastern counterpart—has by now been existing longer than the Weimar Republic and the Third Reich combined. There is no doubt that the widespread aversion to history after World War II—after so much and direct experience and suffering of German history—was as much responsible for that temporary tuning—out of the recent past in this country as was the nearly exclusive fixation on reconstruction and on the establishment of a secure, affluent existence—and that this aversion entailed serious consequences for the present.

In the GDR, the situation is different, not only because Marxist-Leninist historiography has from the outset directed special attention to contemporary, post-1945 history; the nearly total upheaval that took place in the GDR in the political, economic and social realms has made the Germans living there more aware of and more interested in current history, especially the history of the postwar period including the establishment and development of two German states.

The great significance that has always been attached to current history by the GDR—not least owing to the consciousness—forming function it is supposed to perform—and that for good reason has been increasing since the beginning of the 1970's, since the Eighth SED Congress in 1971 and the power change through the replacement of Ulbricht by Honecker, has by now made current history the predominant

area of historical research; however, to understand why it has been accorded so much significance, one must take into consideration the overall development of historiography in the SBZ [Soviet zone of occupation]/GDR. Specifically, this refers to the transformation process involving ideology, institutions and people that began in the second half of 1948 under a Stalinist slogan—"Seize the Fortress of Science"—and that caused and signified the transformation of a so-called bourgeois historiography into a Marxist-Leninist historiography. At that initial stage in particular, the development of historical research in the other German state has repeatedly been affected by SED interference and this had serious repercussions on the study of current history that was gradually emerging at the end of the 1950's.

Equally important was the fact that at this initial stage of its development GDR historiography was truly fixated—at least up to the mid—1960's—on West German historiography and this in turn had far—reaching effects on the country's own history and on research on current history in particular. At this point, one might note in passing that the FRG's historiography on its part has for many years considered it sufficient to pay at best cursory attention to its Eastern counterpart—and to some extent this is still the case today.

However, current history, which in the GDR is defined—in terms of periodicization—as Contemporary History I, 1917-1945, and Contemporary History II, 1945 up to the present, is determined by other, additional factors which in the framework of our study can only be referred to in passing, however. One might mention here the scientifically—and also politically—ideologically—explosive periodicization discussion, especially in regard to the post-1945 period and the debate concerning content,<sup>2</sup> and finally, the institution-oriented organization within Marxist-Leninist historiography.<sup>3</sup>

In a systematic historical outline, we will in the following present key stages in the development of GDR research in the field of current history; on the basis of this outline, we will then present a catalog of functions of Marxist-Leninist research on contemporary history. In the final part of this article, we will summarize the development up to this point and through comparison with West German research in current history evaluate this development in regard to potential future trends.

#### I. Initial Problems and Political-Ideological Restrictions

From the very beginning until the 1960's, rapid development of current history as a research discipline of Marxist-Leninist historiography in the SBZ/GDR was hampered by the rigorous transformation process that the SED had initiated—in the second half of 1948—in the historiography of the then Soviet zone of occupation.

These measures prompted an increasing number of non-Marxist historians to emigrate to the West; consequently, the young Marxist historiography lacked the scientifically qualified and ideologically reliable cadres as well as the functional, institutional organization necessary to carry out the "new" historiography demanded by the Party--a high-level historiography based on the principles of Marxism-Leninism.<sup>4</sup>

There was another factor that was at least equally inhibitory—especially in regard to the planned development of research on current history. During this initial stage in the SBZ/GDR, the Marxist view of history was greatly influenced and encumbered by the so-called "calamity theory of German history": The personal suffering that many politically active members and functionaries of the German workers' movement underwent during the Nazi period in prisons, in the underground movement or in exile on account of their affiliation with the KPD or SPD and the frequently encountered opinion that German history was marked by tragic constellations and that in contrast to the history of England and above all to the history of France it had never given rise to a successful revolution brought forth the view that German history was nothing but unmitigated calamity. 5

In fact, this theory persisted well into the first years after the establishment of the GDR; 6 a telling illustration in this regard is the title of the multiple-edition book by Alexander Abusch--"Der Irrweg einer Nation" [The Aberration of a Nation] 7-- which reflects this view in well-nigh programmatic fashion.

However, this view of history failed to meet two basic requirements that the Party had imposed on its young historiography:

- 1. A productive, scholarly reexamination of German history--posing new questions vis-a-vis the so-called bourgeois historiography and thus possibly producing different assessments--for the purpose of establishing a positive view of German history.
- 2. A socialist consciousness based on this positive view of history—a consciousness that ultimately was to bring about—through historical legitimation—identification with the political and social system created by the SED.

Thus, 2 years after the establishment of the GDR, the SED--"destroying theory" by means of the resolution of the SED Central Committee of 20 October 1951 on "The Most Important Ideological Tasks of the Party"—opened practically by decree the way to a positive interpretation of German history and established a binding interpretation pattern for the further development of historiography in the GDR. Now there began the presently practicable opening of Marxist-Leninist historiography toward the so-called progressive periods of German history and this opening formed the basis for the well-nigh anatomical preparation of two contrary class lines in German history and in particular in contemporary history, where the so-called progressive line is claimed to be represented exclusively by the GDR; this claim culminates in the view that "the emergence and development of the GDR represents the pinnacle of the history of the German people" and that the so-called reactionary line is pursued by the Federal Republic of Germany.

The SED's 1955 resolution on the "Improvement of Research and Instruction in the Historiography of the German Democratic Republic" was another milestone in the development of GDR historiography; it also documented, however, that the ideological, scientific and organizational advances demanded by the Party in regard to historiography still left much to be desired and did not meet the expectations of the Party. As was the case in previous years, it was criticized that "so far there has hardly been a single historical account of the radical changes in Germany since 1945." The obvious reluctance of the GDR's professional historians to examine problems and aspects of current history—especially in regard to the

post-1945 period--resulted by the end of the 1950's in the well-nigh schizophrenic situation where historical accounts of the most recent past were written almost exclusively by leading members of the party and state apparatus 14--above all by Walter Ulbricht who never concealed his intense personal interest in history and who considered himself a historian, "as a third occupation, as it were." 15

To be sure, there were tangible reasons for the GDR historians' obvious reserve: Firstly, there was a great deal of anxiety on account of the constant interference on the part of the SED; there was confusion especially in regard to the appropriate ideological standpoint, for since the death of Stalin in 1953 the intraparty debates on the problem of de-Stalinization, especially after the 20th CPSU Congress, had intensified. On account of the aggravation of the world-political situation during the Suez crisis and as a result of the uprisings in Hungary and Poland, the intraparty conflicts had reached a new stage and it was only after Walter Ulbricht's victory settled the power struggle among the party leadership that these conflicts came to an end. 16

Secondly, 2 years after the contrary resolution of 1955, the Party again felt it was necessary to criticize the historians, since as a result of "certain ideological vacillations in the ranks of the communist and workers' parties, which have influenced even some Marxist historians of the GDR, 17 the principle of peaceful coexistence between states with different social systems" had been "transferred to the realm of ideology." 18 What the Party meant by this was that in the opinion of the SED leadership the GDR historians were showing insufficient loyalty to Marxist-Leninist principles "in the discussions between representatives of dialectical and historical materialism and the representatives of bourgeois views." 19

To be sure, the Party had helped--through equivocal formulation of the tasks concerning research on current history--to obscure the goals of Marxist-Leninist contemporary historiography: The SED's 1955 resolution stated--all at once: "So far there has hardly been a single historical account of the radical changes in Germany since 1945. There have been very few books or articles that in the presentation of historical truth have concretely discussed the historical lies disseminated by the reactionary West German historiography."<sup>20</sup> So how was one to define contemporary Marxist-Leninist historiography? Scholarly study of Contemporary History or ideological examination of the historiography of the West German class enemy--or both of these at once? At any rate, the function of the intensified contemporary historical research demanded in the GDR was formulated equivocally and this impeded the development of contemporary Marxist-Leninist historiography, what with the ideological clashes during the period between 1953 and 1958.

Moreover, it turned out that the few publications that were actually written by historians and that dealt with aspects of contemporary history were subjected—almost without exception—to sharp criticism which focused either on the adoption of an incorrect ideological standpoint or on the incorrect political evaluation of historical processes.

Cases in point are Werner Plesse's study on the "Antifascist Resistance Struggle in Central Germany (1939-1945),"21 which was criticized on the grounds that it had failed to show "scholarly depth in describing and evaluating the role of the Communist Party of Germany," that it had "actually disregarded it,"22 and the book by Stefan Doernberg--"The Birth of a New Germany"23--which can be considered one of

the first monographs on current history written by a GDR historian.<sup>24</sup> Doernberg was rebuked by two members of the German Academy for Political Science and Jurisprudence who criticized that due to his "formalistic view of the state"<sup>25</sup> he had "taken an essentially one-sided approach to state power, considering it only a result, not an instrument of the people's struggle guided by the Marxist-Leninist Party"<sup>26</sup> and that he had thus released "tendencies toward establishing a contrast between the people and the state";<sup>27</sup> this, they claimed, was harmful to the specifically consciousness-forming function of accounts of current history.

Undoubtedly, the harshest criticism of the first results of the early Marxist-Leninist research on current history in the GDR--criticism that at the same time represented the Party's most massive revision of interpretation vis-a-vis historical science--was the rejection of the theses specifically formulated in 1958 on the occasion of the 40th anniversary of the November Revolution. Ulbricht's criticism of the historians was unequivocal: "In the course of elaboration of the present theses, there were revealed in the commission established by the Politburo basic differences of opinion and incorrect views on the nature of the November Revolu-Some of the comrades in the historical profession took a position opposed to the resolution of the SED executive board. How did this come to pass?"28 There followed an extensive explanation concerning the background of these erroneous positions of historians exposed to "revisionist influence." This intervention, which discredited the GDR historians and practically declared their studies to be worthless, represents the nadir in the development of GDR historiography as a whole and of the Marxist-Leninist study of contemporary history in particular. Small wonder that the historians in the GDR were reluctant to meet the expectations and intensify their study of problems pertaining to current history. Consequently, the publications dealing with aspects of current history remained few in number and most of them showed a propaganda slant.

During this first developmental phase of Marxist-Leninist historiography in the GDR, it became obvious—and it has remained obvious up to the present—that current history is linked with politics and ideology and that in comparison with other research areas of GDR historiography it thus is exposed and must react to stronger jolts. A conference staged in 1959, which must be considered "the first big academic conference in the field of current history" in the GDR, arrived at the conclusion that now as before "important historical problems are settled not by the historians, but by the leadership of the Socialist Unity Party." 30

In retrospect it appears, however—the admonitions urging intensified study of contemporary history notwithstanding—that the SED gradually succeeded in overcoming this reluctance on the part of the historians. For 2 years later, Ernst Diehl, Central Committee member in charge of historiography and highest—ranking historian in the GDR, stated in a tone of unmistakable irony that the SED had now succeeded in "overcoming a kind of distance theory that had been widely held among the historians of our republic. According to this theory, thorough scholarly study of historical processes, which are still going on or have just been completed, is impossible, as is effective historiography without access to all documents. In fact, this view amounted to a pseudoacademic separation of historiography from practical life, from the crucial problems of our people."31

It is a fact that the intensified study of contemporary historical problems that the SED had constantly—and at times vehemently—been calling for finally led to a

considerable increase in the number of publications on current history, and owing to the prescribed dual function of contemporary historical research—namely at the same time militantly to review the historiography of the Federal Republic—the latter was at that time somewhat more prevalent. To a large extent, this was attributable to the fact that as a result of the rapid increase in the number of refugees during the 2 years before the erection of the wall and a considerable period after 13 August 1961, the GDR was experiencing a phase of uncertainty during which it feared and thus wanted to repel ideological diversion tactics on the part of the Federal Republic. Summing up, we should note that approximately since the Fifth SED Congress in 1958 contemporary historical research in the GDR has been showing an—in part enforced—increase.32

II. Observations on the Consolidation of Historiography and the Institutionalization of Contemporary Historical Research in the GDR

Since the beginning of the 1960's, the increasing consolidation of historiography as a whole has assumed crucial importance for the further development of Marxist-Leninist research on current history. In part, this was a result of the SED's interventions after 1955, which aimed to bring about greater historiographical homogeneity in regard to ideology and research personnel (this developmental stage could aptly be called "discipline phase"); moreover, there was an easing up of tension in the Party/historiography relationship. In this connection, it should be noted that here there never was a really deep or even basic conflict in the ideological realm; rather, the conflicts resulted from the relationship between the requirements of politics and their implementation in historiography, <sup>33</sup> especially since by the mid-1960's GDR historiography produced independent results—e.g. the eight-volume "History of the German Workers' Movement" <sup>34</sup>—which was celebrated even by the Party—and the richly appointed three-volume "History of Germany" <sup>35</sup> published in 1968.

The intensified orientation toward the history of the workers' movement since 1962, which was manifested by the SED Central Committee's advocacy of preparation of an outline of the history of the German workers' movement 36 and which was confirmed a year later by the Sixth Party Congress, did by no means diminish the top-priority goal of intensification of contemporary historical research. With increasing emphasis on the post-1945 period, Marxist-Leninist historiography was directed toward the establishment and development of the GDR as a result of the continuous and regular developmental process of the German workers' movement. Doernberg's "Brief History of the GDR," which was based on this outline and published--after extensive revision--in 1964 and subsequent editions, was the first comprehensive account of the history of the second German state. This orientation toward the history of the workers' movement ran parallel to the SED's claim--advanced at the Sixth Party Congress--to national and class leadership in Germany. In other respects, too, this party congress marked the beginning of an identity formulation specific to the GDR, which until the end of the Ulbricht era in May 1971 was to remain the dominant characteristic in the GDR's self-portrayal.

Regarding contemporary historical research in the GDR, the 1960's represent the gradual transition from a primarily propaganda-oriented historiography constantly squabbling with West German historiography to a methodological as well as thematic differentiation in regard to the treatment of research projects in current history. The key article providing guidelines for historiography after the Sixth Party

Congress stated: "Special attention is to be directed toward examination of the problems concerning socialist construction in the GDR, toward the historical role of the first German workers' and farmers' state, and toward unmasking the hostility the West German clerical-militaristic regime harbors against the people."<sup>37</sup> This sequence implies a ranking. For in the second half of the 1960's, large-scale research was begun on the history of the SBZ [Soviet zone of occupation], the subsequent GDR, which research focused on the policy pursued by the SED and on the development of the national economy and of foreign policy, and the inclusion of source materials and documents signaled the accelerating retreat of the ideological-propagandistic element. Naturally, the 20th anniversary of the establishment of the GDR in 1969 was a high point in the production of contemporary historical research.<sup>38</sup>

III. The Significance of the Seventh and Eighth Party Congresses in Regard to the Intensification of Contemporary Historical Research in the GDR

The Seventh SED Congress in April 1967 proved to be of special significance and it had correspondingly strong repercussions on contemporary historical research. This Party Congress, which through the formula of a "relatively independent development of the socialist society in the GDR"39 adopted a political-ideological position that was to document the independent development of the GDR, was even within the Eastern Bloc an extraordinary political-ideological phenomenon, what with its propaganda for the "development of the advanced social system in the GDR."40

As regards the development of GDR historiography beyond the Ulbricht period, an important factor was the special function attributed to the social sciences. It reflected the system-oriented conceptions that had now come into favor: Society was conceived as a total system comprising dependent subsystems; accordingly, science was defined as a subsystem, i.e. as "immediate productive force" or "main productive force." This reflected the SED's intention to increase the sociopolitical and ideological effectiveness of the social sciences. The discipline of history—the most important Marxist-Leninist social science—was accorded the crucial function in the development of a socialist view of history that was to form the nucleus of the projected national consciousness of the GDR. Regarding the development of historiography in the GDR, this entailed a large—scale discussion within the academic disciplines on the problems concerning history and historical consciousness in the socialist society; this discussion soon obscured the impetus provided by the Party and led to a truly scholarly debate which in regard to the level of intensity was unprecedented.

At the same time, this internal academic debate had consequences that went beyond the problems discussed: It made the GDR's Marxist-Leninist historiography intensify the study of theoretical and methodological problems. For the incipient—and so far continuing—process of theoretization of historical research in the GDR entailed expansion, implementation and differentiation of the historical theory—and methodology—related potential and this has been a contributing factor in the—in part considerable—broadening of the interpretive scope of the GDR's Marxist—Leninist historical research.<sup>41</sup>

This process had repercussions on the research work in the field of contemporary history. Aside from the fact that the—strongly GDR—centric—portrayal of history (or self-portrayal) advocated by the Eighth Party Congress directly promoted

contemporary historical research and made it the predominant historical research area, the study of the country's post-1945 history produced increasingly differentiated approaches and evaluations, especially since the Party kept up its demand for presentation of a concrete view of history. This has remained true up to the present: "To understand the world in historical terms—this is no empty formula, no abstract thesis devoid of concrete historical life; for the scientific world view must put its imprint on the activities of the people. This calls for a true conception of the key aspects of the course of history; to attain such a conception, one must fully know history, including its contradictions and conflicts, its dramatic aspects, and the struggles, defeats and victories of the progressive classes: The conception of history does not consist of a sum total of abstract theoretical formulas; it presupposes knowledge of the ineluctable developmental process of society in all of its concrete forms."<sup>42</sup>

Thus the hitherto last and still valid political and ideological change of course undertaken by the SED at the Eighth Party Congress in 1971 does not signal any restriction or diminution of contemporary historical research in the GDR. It was precisely in the list of subjects of current history that changes were evident: Since about 1973, the research area "Contemporary History II," i.e. post-1945 history, has taken precedence over "Contemporary History I," i.e. the period from 1917 to 1945.43

Since then, the historical reorientation that was ordered by the Party and that remained unchanged at the following party congresses has been of crucial importance for contemporary historical research in the GDR. The slogan "Global Revolutionary Process,"44 which was advanced in 1971, signaled the withdrawal of the GDR-centric interpretation of history, which had been emphasized at the end of the Ulbricht period, in favor of an internationalist interpretation of history. Accordingly, the GDR's political-ideological position--defined by the Eighth Party Congress (1967) as a "relatively independent and long-term development of socialism in the GDR"--was rejected and the social development of socialism in the GDR was declared to be in conformity with the formula: "Integral part of the world-historical socioeconomic system of socialism/communism." In political terms, this formula expressed anew an intensification of the ties with the Soviet Union and the neighboring socialist states; ideologically, it reestablished the link with dogmatic positions of Leninism. Through the internationalist interpretation of history imposed on it, GDR historiography is above all expected to elaborate the significance of the October Revolution for GDR history and the role of the Soviet Army after 1945 "as integral parts of GDR history,"45 i.e. as guidelines for the interpretation of contemporary history in the GDR.

This new orientation of the SED almost automatically gave rise among GDR historians to another periodicization debate on the post-1945 development in the SBZ [Soviet zone of occupation], the subsequent GDR. The "internationalist approach" initiated by the Party prompted the Marxist-Leninist researchers in the field of contemporary history to interpret the process of establishing and developing the GDR and the territory of the Soviet zone of occupation after World War II as a constituent part of a wave of revolutions in eastern and southeastern Europe—an antifascist—democratic revolution from 1945 to 1949 and—beginning with the establishment of the GDR—a socialist revolution, which revolutions "coincided with the emergence of other socialist states and with the formation of the global socialist system"; 47 that is to say that developmental conditions specific to the GDR were

and are no longer emphasized; rather, the emphasis now is on the developmental parallels with the other socialist states of East Europe. $^{48}$ 

At the Eighth Party Congress the SED adopted a new position on the national question and this was another factor that affected the interpretation of current history by GDR historiography. This political change of course was a response to the Ostpolitik pursued by the social-liberal coalition whose Germany-policy formula—"two states, one nation"—was at variance with the Party's demarcation—oriented intentions. According to Honecker's statements, the national question must be considered in terms of its "class content" 49 and on German soil the national question has therefore conclusively been settled. Honecker claimed that whereas the Federal Republic of Germany continued to maintain the "bourgeois nation" characterized by the class contrast between the bourgeoisie and the working masses, the GDR was developing the socialist nation. Subsequently, contemporary historical accounts of the development of the GDR put greater emphasis on the adjective "socialist" than on the noun "nation."

#### IV. Present Developments and Trends

Of late, GDR publications on current history have shown certain beginnings of a more critical attitude toward the country's history and occasionally this criticism has affected even the SED. An example representative of several articles of this kind is the problem of Poland's western border in 1948/49: "Extensive evaluation of the international experience and extension of the international relations were impracticable as long as the SED had not developed an internationalist attitude toward the Oder-Neisse border. Not all members of the Party had drawn the right conclusions from the results of World War II -- a war caused by German imperialism. The SED declared the overcoming of anti-Polish tendencies to be the precondition for neighborly and friendly relations with the People's Republic of Poland." $^{50}$ Such beginnings are remarkable, but it should be noted that these reeducation processes apparently have failed to produce significant results--both in the Party and among the GDR population. In spite of these beginnings, one must not overlook the fact that now as before there are contemporary historical subjects and problems that are simply suppressed, because they cannot be put under taboo. This goes above all for 17 June 1953 and 13 August 1961.51

Summing up, one should point out that in the GDR the 1970's became the decade of contemporary historical research. In this respect, the emphasis clearly lay and still lies on the post-1945 period. The publications comprised both general accounts and studies on special subjects and social developments of GDR history. 52 Undoubtedly, these--from the GDR's point of view certainly positive--achievements of contemporary historical research with its characteristic concentration on the postwar period also reflect the GDR's increased self-assurance. Since the beginning of the 1970's, the other German state has obviously been interested in legitimizing itself on the basis of its own history and it has tried to impart stability to this attitude and this self-image.

#### **FOOTNOTES**

1. Quoted from FRANKFURTER ALLGEMEINE ZEITUNG, 21 Sept 81, p 2.

- For a comprehensive account, see Christina von Buxhoeveden, "Geschichtswissenschaft und Politik in der DDR. Das Problem der Periodisierung" [Historiography and Politics in the GDR. The Problem of Periodicization], Cologne, 1980.
- 3. See Guenther Heydemann, "Geschichtswissenschaft im geteilten Deutschland. Entwicklungsgeschichte, Organisationsstruktur, Funktionen, Theorie- und Methodenprobleme in der Bundesrepublik Deutschland und in der DDR" [Historiography in Divided Germany. Background, Organizational Structure, Functions, Theoretical and Methodological Problems in the Federal Republic of Germany and in the GDR], Frankfurt/Main, 1980, pp 174 ff.
- 4. Guenther Heydemann, "Geschichtswissenschaft...," op. cit., pp 143 ff.
- 5. Regarding the mood and atmosphere among the KPD members in exile, see Werner Berthold, "Observations on the Struggle of the KPD Leadership Against the Fascist Ideology of History and the Calamity Conception in German History, 1939 to 1945," ZEITSCHRIFT FUER GESCHICHTSWISSENSCHAFT (ZFG), Vol 17, No 6, 1969, pp 689 ff.
- 6. See Ernst Diehl and Rolf Dlubek, "The Historians of the German Democratic Republic Are Facing New Great Tasks," EINHEIT, Vol 10, No 9, 1955, p 883.
- 7. First edition, Berlin, 1946.
- 8. Dieh1/Dlubek, "The Historians...," op. cit., p 883.
- 9. Reprinted in: "Dokumente der SED" [SED Documents], Vol 3, pp 581 ff. Note the following statement: "The history of Germany comprises not only the ignominious deeds of the ruling classes and of the German imperialists. The history of our fatherland also comprises many freedom-oriented, revolutionary actions and significant achievements of the great sons and daughters of the German people for the development of German culture and of world culture. The scientific study of German history from the point of view of Marxism-Leninism will help to intensify the national struggle to bring about the unity of the working class and to rally all working people in town and country around the working class."
- 10. Ernst Diehl, "The History of the German People in the World-Historical Process," ZFG, Vol 21, No 3, 1973, pp 272-288.
- 11. ZFG, Vol 3, No 4, 1955, pp 507-527.
- 12. See ibid., p 510: "Due to a number of serious ideological and organizational deficiencies, historiography in the German Democratic Republic has failed to meet the requirements of the national struggle and of socialist construction in the GDR." See also the following articles: "The Significance of the Fourth Congress of the Socialist Unity Party of Germany for Historiography," ZFG, Vol 2, No 3, 1954; in regard to contemporary historical research in the Federal Republic, especially by Hans Rothfels, see Guenter Paulus, "Scientific Study of Current History or Defense of German Imperialism," ZFG, Vol 3, No 1, 1955, pp 3-28; "On the Occasion of the Tenth Anniversary of the Liberation," ZFG, Vol 3, No 4, 1955, pp 528 ff.; "The Working Class Party and Historiography," ZFG, Vol 3, No 5, 1955, especially p 678.

- 13. "The Improvement of Research and Instruction...," op. cit., p 511.
- 14. Walter Ulbricht, "Zur Geschichte der neuesten Zeit" [Observations on Contemporary History], Berlin, 1955; Otto Winzer, "Zwoelf Jahre Kampf gegen Faschismus und Krieg" [Twelve Years of Struggle Against Fascism and War], Berlin, 1955; Walter Ulbricht, "Die Entwicklung des deutschen volksdemokratischen Staates 1945 bis 1958" [The Development of the German National-Democratic State, 1945 to 1958], Berlin, 1955.
- 15. See Lothar Berthold, "My Third Occupation, As It Were," NEUES DEUTSCHLAND, 14 Jun 64.
- 16. Regarding the political background, see Hermann Weber, "Kleine Geschichte der DDR" [Brief History of the GDR], Cologne, 1980, pp 87 ff.
- 17. See "Present Tasks of GDR Historiography," ZFG, Vol 4, No 3, 1957, pp 449-455.
- 18. Ibid.
- 19. Op. cit., p 453.
- 20. "The Improvement of Research...," op. cit., p 511.
- 21. Reprinted in ZFG, Vol 2, No 6, 1954, pp 813 ff.
- 22. In this regard, see the discussion on the article by Werner Plesse: "Observations on the Antifascist Resistance Struggle in Central Germany (1933 to 1945)," ZFG, Vol 3, No 6, 1955, pp 928-933.
- 23. "Die Geburt eines neuen Deutschland. Die antifaschistisch-demokratische Umwaelzung und die Entstehung der DDR" [Birth of a New Germany. The Antifascist-Democratic Upheaval and the Emergence of the GDR], Berlin, 1959.
- 24. One should add here the following works: Werner Horn, "Der Kampf der Arbeiterklasse um die Errichtung der antifaschistisch-demokratischen Ordnung in Deutschland (1945 bis 1949)" [The Struggle of the Working Class for the Establishment of the Antifascist-Democratic Order in Germany (1945 to 1949)], Berlin, 1958; H. Lipski, "Der Kampf der deutschen Arbeiterklasse und aller demokratischen Kraefte unter Fuehrung der Partei um die Errichtung der antifaschistisch-demokratischen Ordnung in Deutschland (1945 bis 1949)" [The Struggle of the German Working Class and of All Democratic Forces under the Direction of the Party for the Establishment of the Antifascist-Democratic Order in Germany (1945 to 1949)], Berlin, 1960; Hans Mueller, "Die Entwicklung der SED und ihr Kampf fuer ein neues Deutschland 1945 bis 1949" [The Development of the SED and Its Struggle for a New Germany, 1945 to 1949], East Berlin, 1961.
- 25. Erwin Hellmann and Lucie Haupt, "Observations on the Problem of the State in GDR Historiography," STAAT UND RECHT, No 5, 1960, pp 744-759.
- 26. Op. cit., p 747.

- 27. Op. cit., p 753.
- 28. See Walter Ulbricht, "Substantiation of the Theses on the November Revolution," ZFG, Vol 6, special issue, 1958, pp 28-54.
- 29. "A Scientific Conference on the Significance of GDR History," (Guenter Benser), BZG, Vol 3, No 1, 1960, pp 181-194.
- 30. Op. cit., p 191.
- 31. Ernst Diehl, "Observations on the State and the Tasks of the Research Work Concerning Problems of Post-1945 History," UNSERE ZEIT, No 3, 1961, pp 237 ff.
- 32. This finding is confirmed by Chr. v. Buxhoeveden, "Geschichtswissenschaft...," op. cit., p 161.
- 33. To prevent misunderstandings and rash assumptions, see Guenther Heydemann, "Geschichtswissenschaft...," op. cit., pp 175 ff.
- 34. Dietz Verlag, East Berlin, 1966.
- 35. Deutscher Verlag der Wissenschaften VEB, East Berlin, 1968.
- 36. In this regard, see ZFG, Vol 10, No 6, 1962.
- 37. "The Program of Socialism and the Tasks of the GDR Historians," ZFG, Vol 11, No 2, 1963, p 257.
- 38. It is interesting that most of the ZFG articles on this subject are memoirs; scholarly articles on current history play only a secondary role. See ZFG, Vol 17, No 7, 1969, pp 864 ff. and No 8, pp 1003 ff.
- 39. In this regard, see the comprehensive account by Hans Lades, "Observations on the Function of the 'Developed Social System of Socialism' in the GDR," in: "Aus Politik und Zeitgeschichte" [Politics and Current History], Vol 6, 1971.
- 40. In this regard, see Frank Reuter, "Geschichtsbewusstein in der DDR. Programm und Aktion" [Historical Consciousness in the GDR. Program and Action], Cologne, 1973; Reuter's study covers this process which was initiated by the Seventh SED Congress.
- 41. Guenther Heydemann, "The Theory Boom in the GDR's Marxist-Leninist Historiog-raphy Since 1967. Causes--Development--Prospects," DEUTSCHLAND ARCHIV, Vol 13, No 3, 1980, pp 260-271.
- 42. Thus Horst Bartel and Walter Schmidt, "New Problems in GDR Historiography. Observations on the Evaluation of the Eighth SED Congress by the Historians," ZFG, Vol 20, No 7, 1972, pp 707 ff.
- 43. This can be proved statistically. A quantitative analysis which was prepared on the basis of the articles on current history published in the ZEITSCHRIFT FUER GESCHICHTSWISSENSCHAFT (ZFG), the most important scholarly organ of GDR historiography (first issue in 1953), is due to be published.

- 44. In this regard, see the comprehensive account by Ulrich Neuhaeusser-Wespy, "The SED and History. Problems and Aspects of the Present Reorientation of GDR Historiography," in "Aus Politik und Zeitgeschichte" [Politics and Current History], Vol 41, 1976.
- 45. Christina von Buxhoeveden, "Geschichtswissenschaft und Politik...," op. cit., p 169.
- 46. Heinz Heitzer, "New Problems Concerning Research on GDR History," ZFG, Vol 20, No 8, 1972, pp 954-966.
- 47. Ernst Diehl, "The History of the German People in the World-Historical Process," ZFG, Vol 21, No 3, 1973, pp 272-288.
- 48. See Christina von Buxhoeveden, "Geschichtswissenschaft...," op. cit., pp 168 ff.
- 49. See "DDR-Handbuch" [GDR Handbook], edited by Peter Christian Ludz and Johannes Kuppe, 2nd revised edition, 1979; in particular, see "Nation and National Question," pp 748 ff.
- 50. Thus Gerd Dietrich, "Observations on the SED's Internationalist Work, 1948/49," ZFG, Vol 27, No 9, 1979, pp 820-834.
- 51. In the latest overall account of GDR history--"Geschichte der Deutschen Demokratischen Republik" [History of the German Democratic Republic], East Berlin, 1981--17 June 1953 still is considered a "counterrevolutionary putsch," while 13 August 1961 is called "safeguarding of the state border"; see pp. 156 ff. and p 228.
- 52. Thus the multiple-edition book "DDR--Werden und Wachsen. Zur Geschichte der Deutschen Demokratischen Republik" [GDR--Development and Growth. On the History of the German Democratic Republic]; see also "Grundriss der deutschen Geschichte. Von den Anfaengen der Geschichte des deutschen Volkes bis zur Gestaltung der entwickelten sozialistischen Gesellschaft in der Deutschen Demokratischen Republik" [Outline of German History. From the Beginnings of the History of the German People to the Development of the Advanced Socialist Society in the German Democratic Republic], 2nd revised edition, 1979; in this work, the post-1945 period takes up nearly half of the text. Equally important are the following monographs on current history: "Abriss der Geschichte der SED" [Outline of the History of the SED], Frankfurt/Main, 1978; Joachim Streisand, "Kulturgeschichte der DDR" [Cultural History of the GDR], Cologne, 1981.

8760

CSO: 2300/416

#### CENTRAL COMMITTEE SECRETARY INTERVIEWED ON PRESS PROBLEMS

Budapest ELET ES IRODALOM in Hungarian 24 Sep 82 p 3

[Interview with Jan Glowczyk, PZPR Central Committee Secretary, in Warsaw by Andras Domany; no date given]

The changes which have occurred in Poland since the summer of 1980 have exercised a great influence also on the press, indicating the conflicts and political struggles which are taking place in society. With the introduction of martial law most of the newspapers did not appear but -- as the "verification" of staff members in certain editorial offices and the course to be followed was concluded -- the great majority of the pre-December 13 newspapers appeared by the end of May 1982, although several well-known and popular names disappeared from their columns. The press is not only another area of agitation. The radio, TV and press are striving to regain their readers. At the same time, this indicates the struggle of the country's leadership for the confidence of the people. Thus the press is perhaps more important now then before under normal circumstances. I conducted the following conversation in Warsaw with Jan Glowczyk, the 55-year-old economist, who since the summer of 1981 and the 9th Special Congress of the PZPR, is an alternate member of the Politburo. When we met, he was the chief editor of the ZYCIE GOSPODARCZE, which is similar to the FIGYELO. Since then he was elected secretary of the PZPR Central Committee and the scope of his duties includes party guidance of the press.

[Question] How do you view the internal situation of the Polish press today?

[Answer] First I would like to speak of those political factors which in the past 2 years have strongly influenced the situation and the atmosphere. Our calling is a very difficult one, for we must convince the reader of the correctness of party and state policy. The press is not an independent political power, nor can it be, although there are those who believe differently. Therefore, when serious errors occur in party and economic policy, the position of the newspaper writers becomes difficult. This is all the more true because a significant part of the population has clearly seen for a long time that matters are not going well. Many working members have felt they were guilty, as if they had a share in a mistaken policy. This is understandable in that respectable journalists also tried to publicize with conviction that which did not turn out to be correct. It is a fact that chiefly in the daily press, the radio and the TV--where there is less opportunity for deep analysis--many felt themselves frustrated politically and morally.

[Question] You are referring to the period after August 1980, are you not?

[Answer] Yes. Many working members of the press had a guilty conscience and wanted to suffer on behalf of the masses, taking on themselves the mistakes by questioning everything which the party and the state leadership had done. Many of them resolved never again to represent anything uncritically. Yes, indeed, but in the meantime there appeared organized, antisocialist social forces which had their own ideology, policy and press. Well, some of the journalists joined up with these--either consciously or under the influence of the above-mentioned psychological influence. In fact, some of them began to serve these forces as uncritically and without thought as they did the mistaken official policy of the 1970's. This attitude of the press was destructive--it is true that frequently they attacked something which actually needed to be changed, but they did not offer any kind of solution. Their main goal was to stir up the readers, and various kinds of ideological influences were mingled in their methods: anarchic notions as well as views which idealized and desired the return of the Polish socio-political system which existed between the two world wars. Under this influence several members of the Federation of Polish Journalists chose a mistaken direction.

#### [Question] What was this mistake?

[Answer] The new bodies of leaders--at least some of the leaders--elected in the fall of 1980 by the Federation of Polish Journalists wanted to make the Federation an independent political power. They thought that the Federation would be the mediator, the arbiter in the skirmishes of the socio-political forces. It was laughable, but still many believed in it, for such a role appears very pleasant. Moreover, a considerable number of them also saw the negative tendencies of Solidarity, and therefore a mediator's position appeared attractive. But there are few journalists, and on the other hand--and we must know this, too -- they always serve someone and something. The saddest thing was that this activity by certain Federation leaders became strong when it was clearly apparent in what direction the extremists were pushing Solidarity. They tried to realize this direction not in 1980 but in the fall of 1981 when one could have really expected them to recognize the situation. I believe that individual ambitions also played a role in this. In any event, a negative political radicalization occurred, and this led consequentially to the introduction of martial law and to the dissolution of the Federation of Polish Journalists following improper conduct by various Federation leaders. This was a difficult decision, and obviously there were unpleasant consequences for us, too. But it is rarely possible to make decisions that are good for everyone. We sought for the least harm. It appeared to us that the renovation of the Federation's operation, in light of the foregoing, would not serve the interests of the journalists.

[Question] Very soon after the dissolution of the Federation, however, the Journalists' Federation of the Polish People's Republic--that is, the successor of the Federation of Polish Journalists was formed.

[Answer] The profession cannot be without an organizational representation. Great changes occurred and are occurring, and it is not a secret: some of the

journalists must give up their career either for good or temporarily, although their numbers are frequently exaggerated. Certain ones found themselves in a difficult situation, but in a situation like this the best political and administrative activity may be onesided. We need an organization which will not reject development, and will represent the interests of the profession.

[Question] The leaders of the new Federation were granted an interview by General Jaruzelski, and later by the chairmen of the two allied parties. What was the substance of these meetings?

[Answer] The provisional leaders of the Journalists' Federation of the Polish People's Republic gave assurances of their support for the policy of the PZPR, the government, and the National Deliverance Military Council. At the same time, they called attention to the problems of the press: they requested assistance for some of those who were dismissed from their career, brought up the matter of the paper shortage, the rapid increase in printing costs, the lag in the payment of journalists, and their social problems. (In this latter subject area, the Federation of Polish Journalists had conducted very valuable activity.)

[Question] According to official data only some of the journalists have joined the new organization. There are prominent editorial offices where few have done this—even among the working members of the party papers. According to others, the "big names" are not joining up. Two well-known journalists, both representatives of the Sejm protested sharply the dissolution of the Federation of Polish Journalists at a recent parliamentary session. Following the first few months, how do you perceive the situation and influence of the Journalists' Federation of the Polish Republic?

[Answer] As I see it, interest and support is livelier in the provinces. The ratio of those joining is relatively smallest in Warsaw, but the capital city is always a special matter. Many do not enter because they do not agree with the general direction of the new organization, and for decades they have been allied with the old organization. I do not want to prophesy, but in my opinion the membership of the new Federation will gradually increase.

[Question] Could it be that there are more members of the PZPR joining the new organization while others for example, working members of the Catholic press-are less inclined to do so?

[Answer] No. As I said, the distribution is primarily by area. Only a short time has passed and the bodies of the new Federation are temporary—moreover, some members of the dissolved Federation's leadership have also joined—and they have much to do. We may and must expect the effect from the work they do.

[Question] We see more and more journals at the vendors. Are most of the press products already appearing?

[Answer] Yes. Several newspapers which have been suspended will not appear any more because, for example, it has no one to do the editing and the staff has been diminished. Others will start again, and new ones have also been

established. Strong debates were conducted, and still are, in all editorial collectives. Frequently, valuable and outstanding working members and respected experts are departing from their place of work simply because they could not remain in the altered circumstances. Editors are revising their ranks, including those which are already permitted to publish, and as I have said these are in the majority.

[Question] I read in an article in POLITYKA that the average total copies of daily newspapers fell from 9.8 million to 8.3 million between the first of December and March. Copies returned to a number of newspapers—including very popular ones—have increased, although so has the number of copies published by certain ones. In any case, it is a striking fact that while last year it was simply impossible to obtain newspapers—this refers to the dailies, week—lies and monthlies alike—now copies are piling up unpurchased at newspaper vendors. What is the reason for this? How much of a role may be played by the fact that since the introduction of martial law some of the readers (and there are reports to this effect) are boycotting the "official" press and do not have confidence in it?

[Answer] Excuse me, I do not believe in the boycott, especially as a lasting phenomenon. People need the press, information. The number of returned copies is fluctuating, it is hard to get a clear picture, and it is chiefly in the capital city--again in Warsaw--that the papers are piling up at the newsstands. (But despite this, it is here that they know everything the best.) I see the following reasons: first of all the price of newspapers rose from one to four-five zlotys in the past 2 years, and the weeklies and the journals sell from between 20 to 80 zlotys. At the same time there was a tremendous increase in the price of foods and other important commodity items. People have less money and they cannot afford to buy five or six weeklies which they will only thumb through because they lack the time to read them thoroughly. And in addition, the atmosphere is different, there are fewer sensational It is entirely understandable that when the press was hanging out what the leaders of the time were doing, or when the latest news was being expected on the strikes, everyone was eager to know what the press would write. Following the great emotional fluctuations, a kind of apathy has come about -- and no wonder. People are tired; after the great tensions and flood of information, they will let the threads drop for a while. There is need for information. I am not worried about that. As for prices, I would prefer in some cases to reduce the circulation of some newspapers -- let them give more and of course better quality--for less money. As for the contents, it is my opinion that all the papers were sold out last year because that was the kind of atmosphere and political situation we had. Now we must work harder to get readers. In my view, this is a good thing.

6691

CSO: 2500/14

#### MODERNIZATION OF SOCIO-OCCUPATIONAL STRUCTURE

Bucharest VIITORUL SOCIAL in Romanian May-Jun 82 pp 416-422

Article by Ioan Margineanu: "The Modernization of the Socio-Occupational Structure"; passages enclosed in slantlines printed in italics/

Text The modernization of the socio-occupational structure refers to the intensive development of all economic sectors and branches, beginning with agriculture, which, through growth in labor productivity, is releasing a large volume of manpower, making it available for other types of activity. Consequently, an increase in the percentage of the population employed in industry and the other nonagricultural sectors is occurring. In addition, the modernization of the socio-occupational structure refers to the process of raising the general level of school and vocational training of the population, to the growth of the percentage of the peak branches bearing technical progress, to the development of science, education and culture.

#### I. Defining Elements of the Socio-Occupational Structure

/The revolutionary transformations that have occurred in Romania/ and /the strong expansion of the production forces have caused radical changes at the level of the employed population by triggering a vast process of socio-occupational mobility/. While the population employed in agriculture in 1950 represented 74 percent of the total employed population, over 68 percent of the employed population in 1980 performed its activity in nonagricultural sectors, with over 35 percent being in industry.

The distribution of the employed population according to economic sectors and branches is given in Table 1.

/Industry and agriculture are the economic branches that have the biggest part of the employed population of the country/ (6.7 million people—that is, 65 percent of the total). /At the end of the past decade, industry became the economic branch with the biggest volume of manpower in the whole national economy/ (3,678,000), thus exceeding the volume of the agricultural population. The headlong development of industry and the appearance of peak industrial branches with regard to the technical level attained have led to the attraction of more and more people to this sector of activity. /The great majority of the worker personnel in industry work in the sector of state industry/ (about 90 percent), with a smaller part being in the artisan cooperative system (about 10 percent).

Table 1. The Evolution of the Employed Population According to Economic Sectors and Branches\*

	Year				
	1950		1980		
	Thousands		Thousands		Evolution from
Sector, Branches	of Persons	2	of Persons	<u>%</u>	1951 to 1980, in %
Employed population	8,377	100.0	10,350	100.0	124
Sector I	6,226	7.43	3,088	29.8	50
Agriculture	6,209	74.1	3,048	29.4	49
Silviculture	17	0.2	40	0.4	224
Sector II	1,187	14.2	4,536	43.8	382
Industry	1,001	12.0	3,678	35.5	<b>36</b> 8
Construction	186	2.2	858	8.3	460
Sector III	453	5.4	1,720	16.7	380
Transportation	167	1.9	630	6.1	374
Telecommunications	22	0.3	80	0.8	367
Commodity circulation	206	2.5	620	6.0	301
Communal administration	58	0.7	390	3.8	677
Sector IV	301	3.6	811	7.8	269
Education	191	2.3	431	4.2	225
Science	19	0.2	98	0.9	514
Health	91	1.1	282	2.7	311
Administration	142	1.7	- 65	0.6	46
Other branches	68	0.8	130	1.3	195

<sup>\* &</sup>quot;Anuarul Statistic al RSR" /The Statistical Yearbook of the Socialist Republic of Romania/, Central Directorate for Statistics, Bucharest, 1981, p 123.

In its turn, /the agricultural population is distributed over 3 sectors/: the great majority of the agricultural workers are members of the /agricultural production co-operatives/--72 percent of the total of 3,048,000 in 1980 (which means that 2,195,000 cooperative members performed work for a number of days without being employed in another socialist unit). The sector of /state agriculture/ has about 15 percent and /peasants with an individual farm/ represent about 13 percent of the agricultural population.

Looking at the distribution of the employed population according to sectors and branches of activity, we find nevertheless that Romania is still a developing country, due to the high percentage of the population employed in agriculture (29.4 percent), which indicates a relatively low labor productivity in this vital field of economic activity, as well as due to the low percentages possessed by sectors III and IV, but especially by some of their branches.

In the following, we want to devote special attention to the analysis of the situation that exists at the level of /the population in agriculture/. Under the conditions in which agriculture represents the only occupation for 3 million people (although the participation in work is unequal), this means that theoretically there is 1 agricultural worker per 7.5 inhabitants. A comparative analysis leads us to the fact that on a world level in countries with developed agriculture, with big reserves for the exportation of agricultural products, the percentage of the population employed in this sector is below 10 percent, there being 1 agricultural worker per 30

or even 50 inhabitants. Of course, the differences from country to country are inherent even at a similar level of economic development and technical equipping, due to the size of the areas, the density of the population, the structure of the land and the activities, the work methods, the degree of exploitation of resources and so on. Nevertheless, such differences as those mentioned earlier also indicate different levels of economic development. However, one thing is beyond any doubt--namely, the fact that agriculture can have a relatively low percentage of workers while still remaining one of the most important economic branches under the conditions of mechanization and growth in labor productivity.

Returning to the analysis of the structure of the agricultural population in our country, one can see a marked /process of feminization and aging of the work force/, a process due to the massive migration from agriculture to industry and other economic branches. It is expected that the extensive changes produced in the structure of the employed population during an active generation (1950-1980) would also lead to some undesirable implications. Such a macrosocial process cannot occur smoothly, without dysfunctionalities. Those who headed toward industry and other more competitive nonagricultural economic branches were, in particular, the young people. At present, certain difficulties in meeting the need for manpower in some sectors are beginning to arise. In contrast to industry and other economic branches, where there is a young average age of the worker personnel, in agriculture the process of aging of the work force has become more and more evident of late. The distribution of the agricultural population according to sex and age in 1977 (the date of the last general census of population) is given in Table 2.

Table 2. The Distribution of the Agricultural Population According to Sex and Age\*

	Total		Women		Men	
<u>Specification</u>	Thousands	2	Thousands	2	Thousands	%
Agricultural population	3,942	100.0	2,470	62.6 100.0	1,472	37.4 100.0
14-15 years	14	0.4	8	0.3	6	0.4
16-19 years	122	3.1	<b>7</b> 3	2.9	49	3.3
20-24 years	244	6.2	157	6.3	87	5.9
25-29 years	331	8.4	215	8.7	116	7.9
30-34 years	348	8.8	228	9.2	120	8.2
35-39 years	470	11.9	310	12.6	160	10.9
40-44 years	547	13.9	355	14.4	192	13.1
45-49 years	544	13.8	350	14.2	194	13.2
50-54 years	528	13.4	332	13.5	196	13.3
55-59 years	318	8.0	202	8.2	116	7.8
Over 60 years	476	12.1	240	9.7	236	16.0

<sup>\* &</sup>quot;Recensamintul Populatiei si Locuintelor din 5 Ianuarie 1977" /The Census of Population and Dwellings on 5 January 1977, Vol II, Central Directorate for Statistics.

As one sees, women constitute the majority of the work force in agriculture (62.6 percent). While there is a suitable distribution according to age in state agriculture, with a preponderance of the male work force, there is a certain imbalance with regard to both the presence of the two sexes and the presence of the young groups in the other agricultural sectors. In the time that has passed, new changes in the volume and percentage of the agricultural population have occurred, especially at the

level of the agricultural production cooperatives and the individual farms, precisely as a result of the nature of the distribution of this population according to age. The aging process has become even more marked in some units and zones, but the process of the recruitment of new contingents of workers has also been going on, especially in the last 2 years.

In another view, one can note the fact that the general value of 29.4 percent that agriculture had out of the total employed population in 1980 was distributed very unevenly on a county basis. So, for example, in 1977 in Brasov County the agricultural population, including people of 65-75 years of age, represented 10 percent of the total employed population in the county, while in a number of counties the agricultural population had percentages of about 50 percent (the counties of Ialomita, Dolj, Buzau, Gorj, Botosani, Salaj and so on) and in other counties the percentage of the agricultural population was around 20 percent (Hunedoara, Prahova, Sibiu and so on). In this way, while in some counties there was 1 agricultural worker per 5 inhabitants, in others the ratio was 1 to 10 and in the case of Brasov County, the most industrialized and urbanized county in the country, the ratio was 1 to 17.

Of course, certain differences between counties are expected to exist with regard to the volume and percentage of the population employed in agriculture, in order to utilize all the resources that are available. Only the scientific substantiation of the manpower need is capable of indicating the optimum values in each particular case.

/Another important characteristic of the socio-occupational structure concerns the distribution of the employed population according to residential areas/. The raison d'etre of the rural localities has always been that of constituting a human community connected with the utilization of natural resources—the cultivation of land, the raising of animals and so on. Agricultural activity was associated with the rural area, it being differentiated from the urban area, with which predominantly nonagricultural activities were associated. In the modern era of industrialization, the villages too are diversifying their economic activities. Nevertheless, although the rural area is no longer exclusively agricultural, it still remains the optimum framework for manifold utilization of the resources of the environment, for performance of agricultural activities both by the basic workers and by other categories of population living in communes.

The analysis of the distribution of the employed population in the two residential areas brings out strikingly the village-city interaction. The structure of the employed population represents an element of the interaction between the residential areas. A number of people live in the rural area and work in the city, just as others live in the city and work in the rural area.

In the case of the urban localities, the active population in the secondary sector (industry, construction) has the absolute majority, and in the rural localities the percentage goes to the active population in the primary sector (agriculture, silviculture). However, industrial and construction activity also characterizes a large part (more than one-fourth) of the population that lives in communes, including the suburban ones.

The changes that have occurred in the structure of the employed population have been accompanied (and, in fact, favored) by /the growth of the degree of instruction of the whole population as a result of the development of education of all grades/.

Table 3. The Distribution of the Active Population According to Economic Sectors and Types of Localities in the Census on 5 January 1977\*

	Total		Municipalities	and Cities	Commune	8
Specification	Thousands of Persons	2	Thousands of Persons	%	Thousands of Persons	<u>%</u>
Population of the country	21,560	100.0	9,396	43.5 100.0	12,164	56.6 100.0
Active population	10,794	50.1	4,573	48.6	6,221	51.1
		100.0		100.0		100.0
Sector I	3,976	36.8	276	6.0	3,700	59.5
Sector II	4,200	38.9	2,548	55 <b>.</b> 7	1,652	26.5
Sector III	1,500	14.0	940	20.6	560	9.0
Sector IV	834	7.7	586	12.8	248	4.0
Others	284	2.6	223	4.9	61	1.0
Active population  Sector I Sector II Sector III Sector IV	3,976 4,200 1,500 834	100.0 36.8 38.9 14.0 7.7 2.6	276 2,548 940 586	48.6 100.0 6.0 55.7 20.6 12.8	3,700 1,652 560 248 61	51.1 100.0 59.5 26.5 9.0 4.0

<sup>\* &</sup>quot;Recensamintul Populatiei si Locuintelor din 5 Ianuarie 1977," Vol II, Central Directorate for Statistics.

One can note the expansion of the types of vocational training of the work force, in correspondence with the diversification and the growth of the complexity of the activities in the sphere of material production and spiritual production.

# II. Trends in the Evolution of the Socio-Occupational Structure

The economic development of the country in the next period, on the basis of the new requirements formulated in the party and state documents, will lead to new changes in the socio-occupational structure, with the process of modernization of it becoming even more pronounced.

- a. /Along with the growth in the degree of employment of the work force/, in conformity with the provisions of the current 5-year plan and the long-term orientations, /the volume and percentage of the population employed in nonagricultural sectors will continue to rise/. This trend that will manifest itself in the evolution of the socio-occupational structure of the country will lead to /the growth of the number and percentage of the industrial population predominantly in those zones of the country with a lower level of industrial development/ (as also happened, in fact, in the last 5-year period), resulting in a relative balancing of the territorial distribution of the production forces in ensuing years, thus also producing /a convergence of the structure of the employed population according to economic sectors on a territorial (county) basis/. At the same time, /the general shifting of the industrial work force toward the peak branches/, bearers of technical progress, and /to-ward the branches supplying raw materials/--the extractive industry--will also grow.
- b. /The trend of a reduction in the percentage of the population employed in agriculture will characterize just those counties in which the agricultural population is very numerous/. In other counties, where the agricultural population is now proving to be insufficient, there being difficulties in doing all the work on time and with quality, an opposite direction of mobility of the work force—that is, toward agriculture—is beginning to appear as a result of the needs felt particularly in some sectors, a mobility also facilitated by the increase in incentives.

- c. The analysis of the socio-occupational structure, of the distribution of the population employed in agriculture according to age, leads to the fact that, /roughly speaking, the process of occupational mobility from agriculture to other economic sectors has ended. Consequently, agriculture is ceasing to be any longer a supplier of manpower for the rest of the national economy/. Intragenerational mobility between agriculture and industry constitutes an almost concluded chapter also for the socio-occupational structure in Romania. Instead, intergenerational mobility will be present. It is stimulated by the very nature of the socialist production relations, which frees the work force from external restraints of a nature to confine it to a predestined field and makes occupational choice truly possible. The further limitation of the volume of the agricultural population is connected more with the natural process of aging of a part of the population that performs its activity in this field. Annually, about 100,000 people leave the basic activity, even if they still continue to do some work and suitable facilities must be provided for them. In contrast, the entering groups are much smaller in volume: 30,000-50,000 per year.
- d. One can also note the fact that the demographic situation in Romania is favorable to the replenishment of the work force in agriculture in the immediate future through the infusion of young labor, including men. A second favorable demographic element, viewed just from the perspective of balancing the structure of the employed population with regard to the percentage of the two sexes in agriculture and supplying manpower to the industrial sectors that are feeling a certain shortage (extraction, ferrous metallurgy and so on), consists of the fact that at the level of the young population of the country the male sex is more numerous by about 10,000 each year for the population of up to 14 years of age. Since more boys than girls were born in the period after the war, in the population of up to 35 years of age in the total value of 12,365,000, the male sex has 6,302,000 (that is, 51 percent)—238,000 more than the female sex.
- e. In its turn, /industry/, through the existing units, will /release a part of the work force/ (through growth in labor productivity) for the new industrial capacities that will be put into operation and for agriculture. It should be mentioned that mobility between industry and agriculture entails certain difficulties, assuming that the latter would be competitive from all viewpoints in the working and living conditions offered. Socialist ownership permits much more easily the changing of the direction of socio-occupational mobility, due to the social character of ownership. Of course, within the socialist society too, the process of self-reproduction of the occupational groups plays an important role. However, it does not limit the processes of socio-occupational mobility and does not constitute an obstacle to the redistribution of the work force among the economic sectors when this becomes necessary. real securing of the possibilities of occupational mobility is directly connected with better fulfillment of the vocational aspirations of the younger generation, the selection of the trade in accordance with the aptitudes of each individual and so on. In the rural area there are sufficient labor resources capable of meeting the needs of agriculture under conditions of competitiveness in relation to other sectors.

In fact, in sociology there is more and more analysis of the phenomenon of "nostalgia for agriculture" present in many industrial workers in the developed countries, with the impossibility of fulfilling the desire becoming greater as a result of the structure of ownership, the cost of agricultural implements and so on.

f. /In Romania, the further meeting of the need for manpower for agriculture will be done in several ways/: first, it is a question of /stabilizing in agriculture those

who perform their activity in this sector/ by limiting the processes of intragenerational mobility between agriculture and industry; second, it is a question of /the entry of new contingents of agricultural workers from the graduates/ of compulsory 10-year education and the graduates of secondary and vocational school, thus forming the model of the modern agricultural worker; it is also a question of the process of the /mobility/ of inhabitants of villages /from industry to agriculture/, some of them working earlier in agriculture, coming either as skilled workers for the mechanization, repair and irrigation sectors or as workers for the other agricultural sectors.

- g. /The combining of agricultural activity with activities of an industrial type to a greater extent/ will be an important feature of the evolution of the socio-occupational structure. In addition, especially in villages, but also in the small (agroindustrial) cities to some extent, /the number of people who will perform agricultural activity complementary to the basic activity will rise/, helping to economically strengthen all rural farms, to supply agricultural products for their own needs and for marketing and to achieve self-supplying. The possibilities of doing agricultural activities as a complement to the activity done in nonagricultural sectors, with effects of the most favorable kind, both economic ones and ones of recreation and restoration of the ability to work, are very numerous. It would be ideal for every person who is near an area of land to be concerned with cultivating it, and special spaces either within the cities or on their periphery can be provided for cityfolk, as has also begun to be done. It should be noted that in other socialist countries too, where the percentage of the permanent agricultural population is about 10 percent of the total employed population, agriculture is practiced, with good results, by countryfolk or cityfolk as a second activity.
- h. In addition, another trend in the change in the socio-occupational structure in the direction of its modernization consists of /the growth of the volume of the population employed in sectors III and IV, by expanding and diversifying the services for the population/, the development of science, education and culture and the healthcare system. One important direction is the development of them in the rural area, where greater needs are felt, precisely in order to rise to the level of the conditions offered by the cities and to become truly competitive with them in the formulation of residential choices by young people, with the advantages of the environment being utilized.
- i. A final aspect that we want to note refers to /the general raising of the level of instruction of the employed population/, due to the higher level of school and vocational training by means of which the replacement of the manpower that ceases activity is done. This process will characterize equally the work force in all sectors of activity, including agriculture, regardless of the residential area. In fact, the measures for stabilizing the personnel in the rural area will themselves lead to substantial changes in the distribution of the active population according to levels of school training on a territorial basis by raising the level of culture in the villages.

12105 CSO: 2700/9

## REPLACEMENT OF WORKERS IN LABOR FORCE DISCUSSED

Bucharest VIITORUL SOCIAL in Romanian May-Jun 82 pp 423-428

Article by Florica Dumitru: "The Evaluation of the Rates of Replacement Within the Labor Resources"; passages enclosed in slantlines printed in italics

Text The planning of the need for personnel who must be provided and trained in order to replace the natural and specific losses requires a good knowledge of the intensity of the phenomenon, which necessitates the evaluation of these losses within the existing work force, in order to provide and train in time suitable contingents in terms of level and structure.

In the specialized literature, the study of the natural losses (old-age pensioning, disability, death) and the specific losses (occupational mobility, fluctuation) within the active population is getting greater interest, due particularly to the studies undertaken by the specialized bodies of the United Nations.

Research done in some industrialized countries\* attests that, within the personnel losses, those generated by natural losses have a relatively low percentage, with the great majority of them being caused by mobility, in general, and by fluctuation, in particular, with the total rates of annual loss reaching, for example, up to 10 percent and even 20 percent in the sector of agricultural production. It is felt that in the newly appearing trades, for which those recruited are younger, the losses are not significant. In addition, the rates of loss have higher values among women, as a result of a more complex motivation that causes their mobility (maternity, greater morbidity, matrimonial reasons, family problems and so on).

In our country, the intensity of the natural and specific losses among worker personnel is followed on a quarterly basis, by the central body for statistics, at the level of the sectors of activity in industry, construction-installation by contract, railroad transportation and automotive transportation, according to ministries and people's councils.

The limits of this strictly statistical information are determined by the fact that, on the one hand, out of the total employed population, only the "worker personnel" category is the object of the records and, on the other hand, the existing data have a general character, not being broken down according to age groups and sex,

<sup>\*</sup> R. Rowat (expert-conseil FAO), "Developpement Economique et Sociale. Personnel Qualifie et Developpement Agricole et Rural," Etude FAO, Rome, 1980.

socioprofessional categories and so on. The characteristics of the different demographic categories with regard to the intensity of the losses, the possibilities of replacement and the duration and cost of the vocational training necessitate the differentiated treatment of them.

The series of data offered by the official statistics show that, in our country too, the great majority of the losses among worker personnel are brought about by "movement" (94 percent) and, within it, by fluctuation and not by natural causes, which have a relatively low percentage (at most 6 percent). Nevertheless, it must be stressed that, although they generate significant economic costs, the losses caused by "movement" involve, in general, occupational categories with vocational training, which, of course, from this viewpoint, necessitates a separate evaluation from the natural losses (pensioning, death, loss of the ability to work).

However, given the stable character of the chance of death and the possibility of cessation of activity at a certain age, the evaluation of the need for human resources for replacing the natural losses within the employed population and among worker personnel can be achieved with a high degree of rigor by using instruments specific to demographic statistics—namely, with the help of the "activity table."

The present study proposes to present an experiment in this regard and some concise results of the determinations made.

# Methodological Specifications

From a methodological viewpoint, the activity table constitutes an application of the mortality table, bearing similarities in calculation to it and taking over from it part of the biometric functions that it includes. Finally, the activity table expresses the cumulative effect of the law of mortality—a factor that, in its turn, constitutes a combination of influences—and of the regimen of activity of the population subjected to analysis, it being a sensitive instrument for measuring the trends in this regard.

At present, there is a great deal of specialized literature referring to these instruments for evaluating the losses, that is, for forecasting the possibilities of meeting in the future the need planned with the help of the activity table, which is also being used currently in the studies prepared by the specialized bodies of the United Nations, especially the ILO /International Labor Organization/.

The most important functions expressed with the help of the activity table, besides "the expectancy of active life" and "the expectancy of inactive life," at the level of each age group according to sex, are "the chance of death per 1,000 active persons," "the rate of departure from activity during active life" and "the rate of departure from activity" after the legal age of pensioning, with the last two quantities also being expressed per 1,000 active persons.

Finally, the same instrument also expresses "the possibilities of entry" into activity at young ages, but, given the fact that its level is the resultant of a group of factors of a demographic, economic, legislative and behavioral nature which operated during the period of analysis and whose stability over time is debatable, its use in projective calculations bears risks with regard to the rigor of the estimates that are obtained. In fact, since, under the conditions of the labor legislation in our

country, the "rates of entry," that is, the "entries," are determined, in particular, by the size of the generation trained for work, the evaluation of these quantities did not constitute a support for substantiation in the projected calculations made.

### Results of the Determinations Made

Using the methodology described in the manual published under the aegis of the United Nations,\* we drew up such an activity table for our country,\*\* a table that expresses the conditions of the law of mortality characteristic of the years 1976-1978 and of the regimen of activity given in the last registration of the total and active population, done on the occasion of the census in January 1977, and the special registration of worker personnel on 30 September 1979 (Table 1).

Table 1. Values of the Specific Rates of Activity (in the Census in January 1977 for the Active Population and in the Special Registration in September 1979 for Worker Personnel)—in %

	Employed Popu	ulation (1977)	Worker Pers	sonnel (1979)
Age Groups	Male	Female	Male	<u>Female</u>
Below 16 years	2.98	3.41	2.2	2.0
16-19 years	45.28	38.44	28.9	22.8
20-24 years	87.06	75.57	14.7	49.3
25-29 years	97.01	83.09	79.6	57.8
30-34 years	97.93	83.53	90.4	57.9
35-39 years	97.16	83.62	91.8	50.9
40-44 years	95.85	81.73	80.9	42.0
45-49 years	93.78	77.58	72.3	33.8
50-54 years	88.78	69.70	59.7	23.8
55-59 years	78.67	52.45	56.9	10.5
60-64 years	44.73	25.21	27.5	1.3
65 <b>-</b> 69 years	20.88	13.20	-	-
70-74 years	13.44	10.26	-	-
75 years and over	8.17	5.89	-	-

The table drawn up took into account both the employed population and the subpopulation of worker personnel, for both sexes, in the Socialist Republic of Romania, with the results of the calculations made offering elements for a more rigorous substantiation of the work specific to the field of planning of labor resources.

As a result of the measurements required by the methodology characteristic of the activity table, the level of the stated specific functions was obtained, of which we give the level of those with a projective value (Table 2).

<sup>\* &</sup>quot;Methodes d'Analyse des Activites Economiques de la Population a Partir des Recensements," Departement des Affaires Economiques et Sociales, St. Soa/Serie A/43. United Nations, New York, 1969.

<sup>\*\*</sup>A single activity table, for the male population, registered on the occasion of the census in 1966, has been published in Romania (Vl. Trebici, "Populatia Romaniei si Cresterea Economica" The Population of Romania and Economic Growth, Politica Publishing House, Bucharest, 1971, p 184).

Table 2. The Values of "the Chance of Death" and of the Rates of "Entry" into and "Departure" from Activity for the Male and Female Employed Population Resulting from the "Activity Table"

(in %) Female Population Male Population Rate of Rate of Chance Rate of Rate of Chance of Death Entry Departure Departure of Death Entry Age Group 0.41 43.22 49.70 Below 16 years 0.42 0.53 153.64 0.54 116.84 16-19 years 183.40 0.65 20-24 years 1.15 400.55 47.00 1.27 364.10 0.71 25-29 years 0.81 3.28 30-34 years 2.13 7.58 1.58 2.10 2.37 2.11 35-39 years 7.32 2.49 1.92 3.74 40-44 years 3.73 15.25 4.62 7.46 45-49 years 7.53 7.92 4.86 35.09 50-54 years 8.42 81.63 65.17 12.68 55-59 years 11.00 149.78 120.98 22.10 60-64 years 35.31 23.23 107.44 65-69 years 153.41 59.86 67.89 87.02 34.96 70-74 years 77.31 50.41 194.23 93.34 75 years and over

In order to determine the actual losses, the potentially employed (probably employed) population and the worker personnel, respectively, were projected, for a start, on the basis of the potentially active contingent, structured according to sex and age, amended with the values of the specific rates of employment (including for worker personnel), which reflect the intensity of the participation in activity according to sex and age in 1977 and 1979, respectively. The "probable" contingents of the employed population and of worker personnel obtained in this way were amended with the chance of death and the probabilities of departure from activity, there being obtained the absolute level of the losses according to the causes that generate them.

The insignificant differences between the level of the employed population planned for 1985 and that projected with the help of the described instruments entitle us to believe that the measurements made lie within acceptable limits of rigor and that the results reflected with the projection of the data are valid.

The dominant characteristics regarding the intensity and evolution of the entries and losses within the employed population (Table 3) are the following:

/The general index of entries/, calculated on the assumption of the employment, in this period, of just the generations of graduates of secondary schools (stages I and II), vocational schools and higher education, has a value of 24.3 per 1,000 employed persons in 1981, and then a spectacular increase will result in the level of 34.9 per 1,000 in 1985;

/The index of losses by death/ gives a picture unfavorable to the employed male population in the sense that, in its turn, the losses are greater than in the employed female population—namely, 4.2-4.6 per 1,000, as compared with 2.4 per 1,000;

Specific Data on the Entries and Departures Within the Employed Population According to Sex, in the 1981-1985 5-Year Period Table 3.

•••		Yea	Year 1981	1	Yea	r 198	Year 1982   Year 1984   Year 1985   Tear	Yea	r 198	2	Yea	r 198	4	Yea	r 196	5	
t gay, wh	Index or Ratio	To-	To- Wom-	Wom-	To-	Men	To- Wom- To- Wom- To- Wom- tal Men en tal Men en tal Men en	ro- tal	Men en	wom-	ro- tal Men	Men	wom-	10- tal	Men en	WOH-	
-	General index of entries	24.3 23.8 24.2 24.9 25.0 24.9 25.6 25.7 25.6 31.0 31.0 30.9 34.9 35.1 34.7	23.8	24.2	24.9	25.0	24.9	25.6	25.7	25.6	31.0	31.0	50.9	34.9	35.1	34.7	
•	(school graduates per																
2	1,000 employed persons) Index of losses by death	3.4	4.2	2.4	3.5	4.3	3.4 4.2 2.4 3.5 4.3 2.4 3.5 4.4 2.4 3.6 4.6 2.4 3.5 4.4 2.3	3.5	4.4	2.4	3.6	4.6	2.4	3.5	4.4	2.3	
ì	(deaths within the em-																
	ployed population per	,															
	1,000 employed persons)																
3.	Index of losses by pen-	11.7	10.4	13.3	11.9	10.9	1.7 10.4 13.3 11.9 10.9 13.1 12.3 11.7 13.1 12.6 12.1 13.1 12.4 12.1 12.7	12.3	11.7	13.1	12.6	12.1	13.1	12.4	12.1	12.7	
	sioning (pensionings per																
	1,000 employed persons)							,									
4.	General index of losses	15.1	14.6	15.7	15.3	15.2	5.1 14.6 15.7 15.3 15.2 15.6 15.8 16.1 15.5 16.2 16.7 15.5 15.9 16.6 15.1	15.8	16.1	15.5	16.2	16.7	15.5	15.9	16.6	15.1	
	(total natural losses																
	per 1,000 employed																
	persons2 + $3$ )																
Ŋ	Index of replacement	9.5	9.2	8.5	9.6	9,8	9.2 9.2 8.5 9.6 9.8 9.3 9.8 9.6 10.1 14.8 14.3 15.4 19.0 18.5 19.6	φ. Θ	9.6	10.1	14.8	14.3	15.4	19.0	18.5	19.6	
in.	(per 1,000 employed																
	persons1 - 4)																
•	Ratio of replacement	160	160 165 155		162	164	162 164 160 162 161 166 193 187 201 220 212	162	161	166	193	187	201	220	212	231	
	(number of "entries" per																
	1,000 "losses")											,					

However, /the index of losses by pensioning/, through the characteristic values, shows bigger losses among employed women (13.3 per 1,000, as compared with 11.0 per 1,000), with trends of a convergence of the values of this indicator, according to sex, in 1985 (12.7 per 1,000, as compared with 12.1 per 1,000);

The different trends, specific to the sexes, expressed by the two quantities are counterbalanced considerably through summation into /a general index of losses/, which fluctuates between 15.1 per 1,000 and 16.2 per 1,000 during the 5-year period, preserving nonetheless a pro-mille gap to the detriment of men;

/The index of replacement/, having a direction similar to that of the natural index of population, will have double the rate of growth in 1985--of course, under the conditions of the constant maintenance of the rates of activity and the probabilities of death that were used;

The ratio of replacement exhibits a trend of a slight decline, from 165 per 1,000 in 1981 to 151 per 1,000 in 1983, within the employed male population, a date after which the possibilities of replacing the losses with graduates of schools and secondary schools will rise to 220 percent in 1985, with a difference within the female resources (231 percent).

The rising values of the ratio of replacement of the losses among employed persons confirm an expanded reproduction of the potentially employed labor resources, involving both the quantitative aspect and the qualitative aspect of them, with regard to the training and the ability to work.

#### Conclusions

Initiated and worked out mainly for the purpose of knowing better the elements for dimensioning the need for personnel to provide and train, the method of demographic evaluations with the help of the mortality and activity tables is used in the study.

The results of the determinations made express /the absolute level of the natural losses/ within the employed population and among worker personnel, according to age groups and sex, according to years of the 1981-1985 5-year period.

The derived quantities obtained by processing the raw data offer original information, useful for knowing the trends of the phenomenon, having a high level of detail (sex. age. causes of natural losses).

/The level of the losses according to sex/ can orient the activity of planning of labor resources—that is, on the occasion of drawing up the balance of the work force, the program for providing, training and improving the work force and the program for increasing the participation of women in the activity in enterprises and institutions.

In addition, the level of the losses according to sex, age groups and causes of losses (death, pensioning during active life and after reaching the legal age of pensioning) can be of interest in the activity of substantiating the plan regarding the funds needed for the payment of pensions.

From a methodological viewpoint, but also a practical one, the work is addressed, in general, to the specialists on matters of the planning of labor resources, social security and pensions, fields in which the need for rigor in the determinations no longer has to be demonstrated.

The fact that the indicators resulting from the calculation of an activity table offer, implicitly, the possibility of comparisons over time and differentiations on a territorial basis is also worth emphasizing. The value of the increase in active live and the increase in inactive life and the number of years of active life lost at the level of a population—products of the same activity table—constitute very important indicators, both for the activity of analysis, diagnosis and forecasting and for that of decisionmaking, knowing that, under the conditions of a planned economy, the problems of the potentially active human resources and of the workplaces must be solved sensibly and the eventuality of an impact must be pointed out in time.

12105 CSO: 2700/9

### VOCATIONAL TRAINING IN AGROINDUSTRIAL SECONDARY SCHOOLS

Bucharest VIITORUL SOCIAL in Romanian May-Jun 82 pp 429-438

Text The new agrarian revolution and the integrated development of education with social practice require at present "...decisive measures for raising the general level of education, for training the work force, for increasing the qualification and organization, the retraining of the working people in all sectors of activity."\* The placement of the agricultural sector in the center of these measures and the radical reconsideration of the importance of the professions specific to this field entail a basic revision of the system of vocational guidance for the specialized secondary schools and require the stimulation of the choices by pupils with good scholastic performances to attend their courses. Under the current conditions, the complexity and delicacy of the biological processes necessitate qualification at high levels for the workers in the primary sector and specialization of the truest value for the future agricultural producers.

In our study we used the data obtained in the investigation of the agroindustrial secondary schools in the counties of Bistrita-Nasaud and Brasov.

1. The statistical data and the sociological research are in relative agreement in distinguishing the phenomenon of aging and feminization of the agricultural work force, with an emphatic accent being put on the necessity of restoring the production potential in this sector. The fact that, out of those who abandoned agricultural work in a certain period, 81.7 percent were young and very young people and 62.6 percent were of the male sex\*\* confirms the depreciation of the agricultural sector and the deterioration of the professional status that this field offers to its workers. The limitation of the emigration from the rural area to the urban area and the material stimulation of the young people's interest in the activities in this basic

<sup>\* &</sup>quot;Programul Partidului Comunist Roman de Faurire a Societatii Socialiste Multilateral Dezvoltate si Inaintare a Romaniei spre Comunism" / The Program of the Romanian Communist Party for Forging the Multilaterally Developed Socialist Society and Advancing Romania Toward Communism , Bucharest, Politica Publishing House, 1975, p 93.

<sup>\*\*&</sup>quot;The Zoning of Agricultural Production According to Counties," a Synthesis, 1980-1985-1990, "Caiet de Studii" /Notebook of Studies/, Bucharest, 1976.

economic branch correspond to the current stage. Referring to this aspect, the secretary general of our party, Comrade Nicolae Ceausescu, stated that one finds "...a more general tendency to go from villages to cities; this tendency is justified up to a certain limit. At the same time, we must ensure the presence of the young people in agriculture, in zootechny."\* Of course, the emigration from agriculture to nonagricultural branches is not caused everywhere by the introduction of technical progress or by the existence of surplus manpower in the villages. At the same time, the sociological research has brought out the fact that the migrational movement from the rural area to the urban area was not followed everywhere by growth in labor productivity or by more marked social development of the localities where the emigration arose. Thus, both for the current activities and, in particular, in the periods of maximum demand on production activity, there is recourse to substitutive forms, there being tried fortuitous methods of gathering and utilizing the harvests achieved, but without the results obtained always being the anticipated ones and without avoiding, in this way, the loss and deterioration of agricultural and food goods.

To the negative effects of an economic nature are added consequences of a social nature, such as: the depopulation of the villages, with a direct effect on the plan indicators and the population's incomes; long-lasting disorders in supplying perishable goods to the markets and a drop in the volume of products for the state supply; the abandonment of farms, for which significant sums of money were allocated and which are taken out of the circuit of social values; the reduction of the school population and the appearance of educational discontinuities in the rural area; the generation of difficulties in organizing the communal centers and systematizing the social space; the appearance of obstacles in the process of social homogenization and the production of imbalances in the contexts of cultural ecology; the overcrowding of the urban localities and the generation of deviant behavior due to the phenomena of being uprooted from one context and not being integrated into another; and so on. With such a group of negative effects, it seems absolutely imperative to change the current evaluative view regarding the agrozootechnical professions, it being necessary to restore the social prestige that should define the producer in this field.

The new agricultural revolution and the growing use of biological substitutes in the processes with a technological character put in other parameters of value the actuality of the work in the primary sector and necessitate other criteria for classifying the professions on the list of this sector. This presupposes a reaction of positive reference—especially by young people—to the spheres of agricultural production and the stimulation of the choice of training in one of the specialties existing in this field.

- 2. Our research was carried out on the basis of a set of six hypotheses, relying on a series of theoretical premises with a profound practical purpose, among which:
- a. If contemporary agriculture is permeated by a true scientific and technical revolution and if its components are subjected to new practical metamorphoses, then the worker in this sector will have to have suitable vocational training in order to be able to master the modern technology and in order to have higher production outputs;

<sup>\*</sup> Nicolae Ceausescu, "Cuvintare la Consfatuirea de Lucru cu Cadrele din Zootehnie"

/A Speech at the Work Conference with Personnel in Zootechny, Bucharest, Politica
Publishing House, 1980, p 6.

- b. If in the rural localities there are CAP's /agricultural production cooperatives/, IAS's /state agricultural enterprises/ and associations with good organization and with economic efficiency, then they will constitute frameworks of positive reference for the generations of pupils of the schools in the rural area and will cause them to be trained in agricultural professions; however, the converse of the previous statement is also just as valid;
- c. If a negative selection of the agricultural work force is observed and if the entrance examinations for the agroindustrial secondary schools do not achieve a certain eliminatory competition among the applicants, then the choice of the generations of pupils of the general school for the professions in the primary sector will be inversely proportional to the level of their scholastic performance;
- d. If both the school in the rural area and the agroindustrial secondary school achieve a true integration with research and production, then an act of equalizing in terms of prestige the agrozootechnical professions with the nonagricultural ones is produced, stimulating the choices of the future graduates of the general school in the rural area to be trained in professions in this sector and orienting their interest toward the agroindustrial secondary schools;
- e. If the agrozootechnical units to which graduates of the agrozootechnical secondary schools are assigned create optimum conditions for exercising the professions obtained through school instruction and if such professions are solicited just as much in the agrozootechnical sectors as those in industry, then general-school graduates with high scholastic performances and with aptitudes for research in the future will be attracted to the secondary schools of this type, eliminating or limiting the phenomenon of negative selection of the work force in the agricultural field and the evasive perception regarding the work in this sector;
- f. If the agricultural units utilize suitably the graduates of the agroindustrial secondary schools in skilled activities and if they are actually involved in matters of management and decisionmaking, then a marked integration of them into the operating mechanism of the respective units is achieved and a constant stability of the skilled personnel is provided.
- 3. As the data of our study indicate, the choice of the graduates of the general school for the secondary schools with an agricultural specialty involves, in general, approximately the same psychopedagogic stages as the choices for other secondary-school specialties and they presuppose relatively the same phases of materialization over time. However, they also add certain characteristic notes, determined by a certain kind of deterioration of the social prestige accorded to agricultural work and by the fact that some economic failures in CAP's and IAS's in the country cause an attitude of rejection of the professions in the primary sector, which directly affects the process of selection of the work force in this field.\* For this reason, in an extensive sample subjected to research, there is a low percentage (1 percent) for

<sup>\*</sup> We dwelled on this aspect in detail in our study "Occupational Choices as a System of Reference to the Generations of Graduates of the School in the Rural Area," in the volume "Invatamint, Productie, Cercetare" / Education, Production, Research /, in the collection "Caiete de Pedagogie" / Notebooks of Pedagogy /, Bucharest, Didactica si Pedagogica Publishing House, 1981, pp 164-195.

the choices for the agrosilvicultural secondary schools,\* there being found a marked fluctuation in the number of pupils during a school year. Thus, examining the situation of the choices for stages I and II of the agroindustrial secondary schools in Bistrita-Nasaud County in April 1980 and analyzing the situation of the filling of the places by means of the entrance examination given in July 1980 (in comparison with the mechanical specialty in all the industrial secondary schools in the county on the same dates), the synoptic situation in Table 1 was obtained.

According to the figures in the columns and on the basis of consulting the records, for stage I of the agricultural secondary schools there were choices for only 45.16 percent (in Bistrita-Nasaud County) and 41.2 percent (in the agricultural secondary schools in Brasov), there remaining unfilled, after the first stage of enrollment, 49.38 percent of the places in those in Bistrita-Nasaud County and 64.28 percent in the agricultural secondary schools in Brasov County. In contrast, the choices for the mechanical specialty in the industrial secondary schools covered 96.53 percent of the available places, with 92 percent being filled.

For stage II of the agricultural secondary schools choices for about 58 percent were expressed and only 54.45 percent of the places posted at the schools in Bistrita-Nasaud County were filled, while at those in Brasov County the percentage was even lower (54 percent) and 53 percent of the places were filled.

The least favorable situation is presented by the schools with a specialty of agricultural machinery operator, where only 7 out of 36 available places were filled in Bistrita, while only 8 out of 36 existing places were filled in Fagaras, in the 1st session of enrollment. In the fall examination session, all those who could be convinced were enrolled, without a competitive entrance examination being organized.

In contrast, in the mechanical section of the industrial secondary schools, the choices expressed by those who wanted to attend the courses of stage II represented 95.11 percent of the existing places, with 82.11 percent of the places being filled in the first examination session.

To the above is added the fact that, out of the 71 applicants enrolled for admission to stage II at the agricultural secondary schools in Bistrita, only 56 graduates came from stage I of the same secondary school and 63.34 percent continued, in the same stage, the courses of the same specialized secondary school. In contrast, 15 applicants admitted through the competitive entrance examination came from other secondary schools in the county, where they had a lower scholastic standing and where they were not sure of success in the competitive entrance examination in the event of greater competition. At the same time, 21 graduates of stage I at this secondary school, with very good school training and with real mental aptitudes, enrolled for stage II at secondary schools of another type, orienting themselves toward other professions than that chosen initially. This apparent aspirational mobility correlates almost linearly both with the process of school stability during the years of study and with the structure of the reasons that determined the choice of the pupils to enroll in these secondary schools. For the first aspect, one's attention is caught by the fact

<sup>\*</sup> D. Bazac and F. Mahler, "The Selection of the Profession, a Pyramid of the Integration of Young People," in the volume "Integrarea Socio-Profesionala a Tineretului" /The Socioprofessional Integration of Young People/, Bucharest, Publishing House of the Academy, 1976, p 87.

Table 1. The Situation of the Choices for Stages I and II on 5 April 1980 and the Situation of the Filling of the Places by Means of the Competitive Entrance Examination on 9 July 1980 (the Agroindustrial Secondary Schools, in Comparison with the Mechanical Specialty in All the Industrial Secondary Schools in Bistrita-Nasaud County)

					,	Stage I	I (11t	h Grade	)
						Vocation	nal Scl	hool	
Name of				<b>4</b> *				Admit-	
Secondary		Stage_I (9						ted to	
School		Choices	Enrolled			Choices	Ap-	Stage	Unem-
(Specialty)	Places	(5 April)	(9 July)	ployed	Places	(5 April)	plied	II	ployed
Bistrita Agro- industrial	108	81	85	23	72	64	71	65	7
Beclean Agro- industrial	108*	65	49	50	72	32	41	36	36
Beclean Voca- tional School	-	-	-	-	36	6	-	6	30
Teaca Agro- industrial	108	31	21	87	_	of application	_	en due	to a
Branch agro- industrial secondary schools	108	57			The t	filling of in relation	the ponto		
Total agro- industrial secondary schools	432	234	155	160	180	104	112	107	<b>7</b> 3
Mechanical specialty in industrial secondary schools	1,040	937	960	80	684	651	506	<b>4</b> 95	186
Branches	684	900	720	84	-	-	_	_	-
Total mechani- cal secondary	1,904	1,837	1,680	104	684	4,651	506	495	186
schools					1.				

<sup>\*</sup> For the Beclean Agroindustrial Secondary School, the 108 places were divided as follows:

a. In stage I, 36 places for agricultural workers (45 choices) and 72 places for agricultural machinery operators (20 choices)—25 places for agricultural workers and 24 places for agricultural machinery operators were filled;

b. In stage II, 36 places for mechanic-agronomists (30 choices, 34 applicants)--30 places were filled--and 36 places for agricultural mechanics (2 choices, 7 applicants)--6 places were filled.

according to which, in the 1st quarter of the 1980-1981 school year at the Bistrita LAI /Agroindustrial Secondary School/, out of 108 pupils enrolled and assigned to 3 parallel classes in the 9th grade-36 left--that is, the equivalent of a whole class--and at the Beclean LAI, out of 69 pupils enrolled in the 9th grade, only 12 transferred to other schools, without producing serious disturbances in the instructional and educational process. It is true that one of the reasons that caused such interschool movement also consisted of the reduction of the number of scholarships to the basic schools and was the consequence of real difficulties of a material nature, felt by pupils right from the start of the first quarter. At the same time, it should be noted that those who asked to transfer from the secondary school at which they were enrolled initially enrolled later at branch secondary schools, also with an agricultural-school specialty, but there also were pupils who obtained approval to attend the courses of secondary schools with a different specialty from that which they left and with harder schooling conditions.

Concerning ourselves with the effects produced in the schools at which those who obtained the notice of withdrawal enrolled later, great difficulties of a teaching and administrative nature were found. First, the very large number of pupils in a single class affected the instructional and educational process, making it impossible to acquire the knowledge for vocational training through integrated learning. Second, the still insufficiently developed technical-material base (at some of the branch secondary schools) often led to recourse to improvised solutions. Third, at these branch secondary schools, the specialized personnel were not suitable everywhere, there being, not rarely, sporadic teacher substitutions or curriculum changes.

All these things have negative effects on the quality of the instructional process and of the vocational training of the pupils. They are not stimulated to have behavior of a creative type and are not induced to develop a heuristic spirit of personally seeking and investigating the solutions to problems of a scholastic nature. Such a large number of pupils in a class transforms it into an amorphous mass, into an aggregation of individuals assembled to hear a lesson but not to also participate in doing it. In such a situation, the pupils remain in the state of an object of education, without rising to that of a subject of it.

4. Regarding self-motivation in the choice to attend the courses of the agroindustrial secondary school, the data obtained from the ninth grade at the Bistrita LAI-after the first quarter of schooling in this specialty (20 January 1981)--correlated with the averages obtained at the end of the eighth grade of the general school from which they graduated, seem significant (Table 2).

Among the specialists there is the opinion that the high aspirations of adolescents are directly and dominantly connected with professions\* and the levels of aspiration can represent, in themselves, a preference for different types and forms of social involvement.\*\* At the same time, it is felt that the selection of the occupational category by adolescents and its distribution in a psychosocial space that tends to be defined constitute a variable dependent on the value of its practical use, but also

<sup>\*</sup> For this aspect, see: Cornelis Johannes von Zeyl, "A Comparative Study of the Relation Between Social Stratification, Mobility Aspirations and Achievement Values," University of California, Los Angeles, 1977, p 223.

<sup>\*\*</sup>Op. cit., p 284.

on the cultural emblems that indicate the social prestige of the profession. In this way, the real (material and mental) factors would be those which orient their occupational choice and which produce the hierarchy of the aspirations in relation to the desired occupation. And then, according to the opinions invoked, there would be a one-to-one correspondence between the level of formative aspiration and the occupational choice, it thus being possible to correlate, in a positive manner, the content of an expected instructional program and the requirements of a known category of posts.\* One does not hesitate to make certain connections of principle between the absolute significance of the levels of aspiration and the social classes or the categories of an occupational nature to which the families of the investigated subjects belong, with the avowed intention of observing the coefficient of influence exercised by the parental environment on the occupational choice and for the purpose of establishing a derivation-of a causal nature-of one from the other.

Table 2.

Indicators	Number of Subjects at the Bistrita LAI	Number of Subjects at the Beclean LAI
Number of pupils investigated	72	57
Area of origin:		
Rural	58	<b>4</b> 9
Urban	14	7
Father's profession:		
Peasant	39	37
Worker in agriculture	11	- 5
Worker in industry	13	8
Worker in construction	1	5
Worker in transportation	2	_
Functionary	2	2
Other situations (children's home)	4	
How they were oriented toward this		
secondary school:		
Advised by teachers	3	5
Advised by parents	16	14
For the sake of agriculture	29	15
Compelled by circumstances	24	12
The belief that they would not succeed	_	11
in other secondary schools		
Want to be trained and to remain in	48	28
agriculture		
Want to change specialties when the	24	29
possibility arises		
Enrolled at the agroindustrial secondary	31	24
school in the first session		
Enrolled at the agroindustrial secondary	41	33
school in the second session		

From the observations synthesized in the research thus far and from the above data, it can be judged that the great majority of those who lean toward agrozootechnical

<sup>\*</sup> Ibidem.

professions come from the rural area and are descended from families of workers in the agricultural sector, justifying, in a way, the sense of the above suppositions and verifying the existence of a certain index of generality in the relationship existing between the profession of the parents and the vocational aspiration of the children. The analysis shows -- at certain social levels -- a correspondence between the categories of professions of the ancestors and the occupational choices formulated by descendants. Some parents have an attitude of reserve toward the activities in the primary sector and, in consequence, it causes them to warn their children to not orient their occupational interest toward work in this field. From this come marked discrepancies between the occupation desired by parents for their children and the plans anticipated by the latter. Consequently, we encountered in some of the pupils in the sixth forms the express intention to be employed in other productive fieldsafter graduating from the agroindustrial secondary school--than the one for which they were trained, and we caught the intention to abandon professions before they were even practiced. Thus, trying to grasp the methods of prospective reference of the pupils in the 12th grade (horticulture) at the specialized secondary school in Bistrita, at the end of the 2d quarter of the past school year, and seeking to enlighten ourselves about their intention to be employed in the work for which they were trained for 4 years, we obtained a series of useful data for the competent authorities in agriculture and education, which could constitute true directives for the action of vocational guidance and formation of those who choose this sphere of future activity. Briefly, these data are contained in Table 3.

### Table 3.

	Indicators	Number
1.	The number of pupils investigated The number of those who want to attend the college: with an agricultural specialty	31 13 11
3.	with a teaching specialty  The number of those who want to remain in agriculture (including those who would attend college)	19
4.	The number of those who want to change their specialty	12

If, in a class of 31 pupils, about 31 percent did not want to practice agricultural professions and if, after 4 years of school, this sector could not become a framework of positive reference, it then follows that the system of initial guidance was extremely spotty and the secondary school was not able to stimulate those premises -- be they only optative -- with which the pupils succeeded there. From the above data it is also possible to derive the idea that, during the years of school, some of the pupils radically reconsidered their initial image of projective reference regarding the desired trade and revised their aspirations, both under the impact of influences of a family nature and under the impact of others of an economic, administrative, cultural and other nature, which have disturbing repercussions on the process of social integration of the future graduates of the agroindustrial secondary schools. Thus, some of the subjects investigated -- and, we believe, not just them -- judging negatively the agricultural occupations and giving them lower scores for intellectual presence in comparison with the trades in the other sectors, develop evasive behavior or an attitude of rejection toward these trades, without projecting aspirations of prestige into a context of an agrarian nature. For these reasons, the pupils with special scholastic success and with high creative potential abandon or tend to abandon the specialty that they acquired through school instruction and want to practice other

trades than those that they chose earlier, producing serious disturbances in the system of recruitment and distribution of the specialized work force and causing extra expenditures for later training for a new occupation. The situations to which we are referring create a kind of uncertain state or an unforeseeable field of random manifestations in the program for rational distribution of human resources on a territorial basis, real quantitative imbalances, but qualitative ones, in particular, between the sectors of the national economy. For the present case, both the way in which the graduates—partially identified—of the earlier series were integrated into the agricultural units to which they were assigned and the number of those who changed their field of productive activity are illustrative. Thus, from a rough estimate regarding three series of graduates of the agroindustrial secondary school in Bistrita-Nasaud, the data contained in the columns of Table 4 were obtained.

Table 4.

Graduation Series of Year, Total Number of Graduates, and Number of Punils

Graduates, and Number of Pupils		C	urrent Field of Activity	
Identified	Agriculture	No	Other Fields	No
1970-1971	Agricultural	2	Manager in trade	1
20 graduates	expert		ADAS \( \subseteq \text{State Insurance Administration} \)	1
12 identified	Plant-protection technician	1	functionary UTC /Union of Communist Youth/ activist	1
	Hothouse	. 1	Secretary	1
	technician	•	Medical assistant	1
	vooimioian		Pitesti UA /expansion unknown/ worker	1
			Brasov UT /"Tractorul" Plant/ worker	1
			Cluj "Vinalcool" worker	1
Total (1970-1971)		4		8
1977-1978	Worker in IAS	2	ADAS functionary	2
34 graduates	CAP accountant	1	Salesperson in trade	1
15 identified	CAP economist Flower hothouses	1 4	ICIL Enterprise for Milk Collection and Industrialization worker	1
			Suceava mineral waters	1
			Not employed	2
Total (1977-1978)		8		7
1978-1979	CAP or IAS	13	Spinning-mill training course	2
34 graduates	technician		Not working	2
22 identified	CAP cashier	1		
	IAS economist	3		
,	IAS crew chief	1		
Total (1978-1979)		18		4
General total		30		19

Out of the total considered,\* 38.79 percent do not work in the sphere of agricultural production and four graduates were not yet employed, which confirms our initial

<sup>\*</sup> Out of the 88 graduates of 3 secondary-school series, we managed to identify the workplaces of only 49 of them, with the current occupation and residence of the others not being known either by the school or by their schoolmates.

hypotheses and reveals the existence of major deficiencies in the system of recruitment, training and utilization of the specialized work force for the primary sector, necessitating, for the present, the intervention of the competent authorities at least in the following spheres of action:

- a. The planning of the schooling figure in the agroindustrial secondary schools in accordance with the forecast on the need for specialized manpower in the state and cooperative agricultural units, in order to prevent the extreme situations of a shortage or a surplus of graduates of specialized secondary schools;
- b. The organization of services with vocational guidance at the level of the schools in the rural area, so that the choices for the future specialties may follow competent testing, done by sociologists, psychologists and educators, which would ensure the selection of suitable trades by the pupils of the general schools and would thus link the aptitudinal plane with that of an occupational nature;
- c. The enactment of a working relationship between the management of the agroindustrial secondary schools and the state and cooperative agricultural units where the graduates of these secondary schools are to be employed, so that the vocational integration of the young specialists may go smoothly and the productive utilization may be efficient. The failure of the administration of the specialized school to have informative data about the way in which its graduates practice the professions for which they were trained is totally unwarranted and it is totally unacceptable for it to not intervene in order to remedy negative situations in which some of these graduates are often found;
- d. The employment of the young graduates in posts of technicians and not posts of unskilled workers or day laborers, as we found in some agricultural units investigated, in order to avoid the abandonment of professions and blot out that negative spectrum through whose prism the activities of the primary sector are evaluated. We believe that some analogies of employment—between the graduates of the industrial secondary schools and those of the agroindustrial secondary schools—would eliminate certain inequalities of an administrative nature and would lead to a kind of parity in prestige between industry and agriculture, between one school and the other;
- e. The achievement of uniform training between the theoretical aspect and the practical one, between the transmission of knowledge and the experiencing of it, so that the level of specialized training may be that required by the new agrarian revolution and by the new level of development of genetic engineering, with positive effects on an economic, cultural and mental plane for the professions in the agroindustrial sector.

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END